

The “Economizing” of Ecology: Why Big, Rare Whales Still Die

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The "Economizing" of Ecology: Why Big, Rare Whales Still Die*

*R. Michael M'Gonigle***

I

INTRODUCTION

It is now over a decade since the "environmental crisis" became an issue of urgent and widespread concern. Yet in that decade little if any improvement has occurred in man's relationship to the world around him. On the contrary, environmental threats are now more serious and of greater variety than ever, and the prospects for their resolution have grown more remote.

The continuing existence of this crisis can best be understood when examined in light of two conflicting perspectives: the economic and the ecological.¹ As presently conceived, these two approaches to human activity seem to present an irreconcilable conflict; we are caught between two competing paradigms.² The nature of the conflict must be recognized and a resolution sought. Only then might a lasting stability for man in his environment be achieved.

This Perspective describes such a conflict of views in relation to one issue, whale conservation. The economic and ecological approaches can be generalized far beyond their technical definitions to include comprehensive and wide-ranging models for human activity, but such a broad comparison is beyond the scope of this Perspective. Instead, beginning with the narrower, nearly traditional usage of these

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1. The terms "economic" and "ecological" have been chosen because, in describing the differing points of reference for two visions of human existence, they have very wide implications. Another author has summarized the two perspectives with the terms "technometric" and "ecometric." See T. O'RIORDAN, ENVIRONMENTALISM I (1976).

2. For the classic statement on paradigm conflicts, see T. KUHN, THE STRUCTURE OF SCIENTIFIC REVOLUTIONS (1970).

terms, the study will assess the history of whale conservation and expand its consideration of the economic and ecological perspectives only as their more general implications become apparent. Based on the author's close involvement with the recent attempts at whale "management,"³ the study reveals that the continued plight of the whales reflects the dominance of an economic over an ecological structure of decisionmaking.

The dominance of economic over ecological behavior has a strong parallel in the contrast between man and the whale; thus, the cause of whale protection has served as a rallying point for many concerned about the planetary environment. Like man (*Homo sapiens*) on land, whales and dolphins (*Cetacea*) at sea stand at the pinnacle of evolution. Yet the contrasts are enormous. The human animal is graced with a high intelligence that has catapulted it into a position of dominance over not only land but, in recent years, over the sea as well. This dominance has been manifested in an unceasing drive to conquer, exploit, and control that has profoundly conditioned our present individual, social, institutional, and environmental existence.

Cetaceans stand in poetic contrast to human history. For tens of millions of years, they have dominated the world's oceans. Unlike man, their aggressively expansionist land-based counterpart, cetaceans have lived at the top of a balanced, only slowly changing cycle of life in the sea. Despite their dominance, these creatures are gentle and passive. This differing character is all the more remarkable because many now believe that cetacean intelligence, although of a profoundly different character than that of man, is man's rival. Yet today cetacea, and the great whales that are a part of that order, stands among the countless victims of our anthropocentric history.

Nowhere else does the conflict between human attitudes and the natural world reach such heights. For the lawyer concerned about the global ecological challenge, the problem is complicated because legal and political systems at all levels reflect the problem and at the same time are being asked to resolve it. Both intra and interstate systems are, as we shall see, adapted to serve economic rather than ecological interests. In sum, the structure for control falls far behind economic and technological forces. In confronting these forces, the challenge—and the paradox—is to use that structure in order to transform it.⁴

3. The method of inquiry used in this paper is policy-oriented (normative) participant observation. This approach (often referred to as the mixture of theory and *praxis*) is distinct from the more commonly sought goal of "value neutral" analysis. My participation has consisted of attendance at five meetings of the International Whaling Commission as a representative of the Greenpeace environmental organization.

4. This analytic emphasis reflects the growing interest among students of international politics with the process of "regime change." See R. KEOHANE & J. NYE, POWER AND

The battle between man and nature has been and will be waged in many international forums. A close evaluation of the International Whaling Commission (IWC) allows us to discern the nature of the complex interaction between economic, political, and environmental interests underlying contemporary international environmental regulation. This evaluation provides the basis for proposals for new decision-making processes and legal structures. When the present IWC convention is contrasted with an ecological ideal, the serious deficiencies of the former are readily apparent. Yet despite the distressing history of the IWC, an examination of the new Southern Oceans Convention indicates that little has been learned. Antarctica is an area where the failure to control exploitation could lead to the devastation of an entire oceanic ecosystem, yet the political system continues to promote economic reward over ecological survival. With the realization that such a specter looms before us, this study is directed toward discovering effective legal and political strategies to achieve the larger transformation so long overdue.

II

WHALING V. WHALES

*A. The Economics of Whaling*⁵

It is appropriate to consider the economics of whaling before considering the ecology of the whales themselves. After all, whales have long been viewed as "resources." In both capitalist and Marxist economic theory, the environmental limits of the production, distribution, and consumption of commodities were long ignored. Even today, environmental values have a limited impact in socialist systems.⁶ In capitalist societies, resource economists have begun in recent years to demonstrate a concern for resource supply and allocation, but, with the demand-based market as the essential point of reference, their concern

INTERDEPENDENCE: WORLD POLITICS IN TRANSITION (1977). See also the work of the World Order Models Project such as R. FALK, A STUDY OF FUTURE WORLDS (1975).

This study is specifically concerned with "the politics and political structures involved in the creation of an environmentally sustainable society." OTT & HILL, *Leviathan, the Open Society, and the Crisis of Ecology*, 31 W. POLITICAL Q. 457 (1978). See generally ANTICIPATORY DEMOCRACY: PEOPLE IN THE POLITICS OF THE FUTURE (C. Bezold ed. 1978). See also H. HENDERSON, CREATING ALTERNATIVE FUTURES; THE END OF ECONOMICS (1978).

5. By far the most exhaustive treatment of the economics of whaling is found in Scarff, *The International Management of Whales, Porpoises and Dolphins: An Interdisciplinary Assessment* (pt. 2), 6 ECOLOGY L.Q. 574 (1977). Extensive bibliographic references are included in his study.

6. See generally M. GOLDMAN, THE SPOILS OF PROGRESS: ENVIRONMENTAL POLLUTION IN THE SOVIET UNION (1972). For a general comparison of the environmental policies of the United States, Japan, and the Soviet Union, see D. KELLEY, K. STUNKELL & R. WESCOTT, THE ECONOMIC SUPERPOWERS AND THE ENVIRONMENT (1976).

has shallow roots.⁷ Resource depletion and environmental disruption are at best only "externalities" that distort the more immediate and basic goals of market production and exchange.

Classical economics requires that the value of a whale taken in the future be "discounted" in relation to the value of a whale killed today, because profits in hand can be invested to earn interest. Thus, if the reproduction rate of whales is less than the prevailing rate of return, rational economic decisionmakers will choose to kill whales today even if this depletes the stocks.⁸ The investor, oblivious to the future, has only to devise a strategy of expenditure that will maximize the return on his investment.

As a consequence of this anti-environmental, yet rational economic, calculus,⁹ exploitation of whales has increased at a much greater rate than has understanding of whale biology. Indeed, uncertainty about whale biology tends to increase, rather than reduce, pressures for exploitation.¹⁰

The predominance of short-term economic considerations is fundamental to our entire social structure,¹¹ but the consequences are, at present, most visible with international "common property" resources. Each state seeks to protect its economic interest in these common resources against encroachment by other states. Garrett Hardin has described this situation as "the tragedy of the commons."¹² It occurs

7. See SCARCITY AND GROWTH RECONSIDERED (V. Smith ed. 1979). In this study, Nicholas Georgescu-Roegen comments that "[n]eo-classical economics . . . has paid practically no attention to natural resources, [ignoring the] issue [of] the intergenerational allocation of resources. This is the problem of natural resources." *Id.* at 95 (emphasis in original).

8. See Clark, *The Economics of Overexploitation*, in MANAGING THE COMMONS 84 (G. Hardin & J. Baden eds. 1977) [hereinafter MANAGING THE COMMONS]. See also Clark & Munro, *Renewable Resource Management and Extinction*, 5 J. ENV'T'L ECON. AND MANAGEMENT 198 (1978). Discounting is intimately connected with the savings-investment-growth-profit cycle that is the fuel of capitalist enterprise. With decreased growth, there would also be a decrease in the rate of discounting the environment.

9. See, e.g., W. OPHULS, *ECOLOGY AND THE POLITICS OF SCARCITY* (1977). Ophuls comments that "[c]ritical ecological resources essential for future well-being even 30 years from now not only have no value to a rational economic decision-maker, they scarcely enter his calculations." *Id.* at 169.

10. May, Beddington, Clark, Holt & Laws, *The Management of Multi-species Fisheries*, 205 SCIENCE 267 (1979). According to these authors,

[u]ncertainty is another aspect of biological systems that has extremely important economic implications. In most instances exploiters will be fairly certain of short-term profitability of a resource system, but will be highly uncertain about long-term biological (or economic) effects. The omnipresent bias toward early benefits will therefore mitigate [*sic*] against conservative regulations whose future benefits are uncertain. Thus, while the biologist may feel that uncertainty should warrant greater caution and reduced harvest, the industry's viewpoint may well be opposite.

Id. at 274 (footnotes omitted).

11. For a discussion of short-term economics and food production, see W. BERRY, *THE UNSETTLING OF AMERICA: CULTURE AND AGRICULTURE* (1977).

12. See Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243-48 (1968). This essay

under the following conditions:

1. Ownership of the resource is held in common.
2. A large number of users have independent rights to the use of the resource.
3. No one user can control the activities of other users, or, conversely, voluntary agreement or willing consent of every user is required in joint action involving the community of users.
4. Total use or demand upon the resource exceeds the supply.¹³

When these conditions are present, the "invisible hand" is truly invisible: the product of the individual pursuit of wealth is the destruction of the resource for all. Because an individual's self-sacrifice will redound not to that individual's benefit but to that of another exploiter, a rational maximizer of utility will, in the absence of unanimous agreement and coercive enforcement, exploit to the full extent of his capacity. As Hardin argues, these are issues for which there are "no technical solutions," only political ones.¹⁴ Only a prior agreement allocating the resource among all users will prevent the wholesale depletion of such "common pool resources." Prior agreement is essential because it is virtually impossible to convince successful competitive exploiters to cut back once they have made an investment and become dependent for employment on that investment.¹⁵ With competitive nation-states acting as no more than spokesmen for their domestic economic interests, this tragedy was tailor made for the international system. The whales have felt the effects of this new economic discovery for centuries.

B. The Ecology of Whales and Man

Can he who has discovered only some of the values of whalebone and whale oil be said to have discovered the true use of the whale? These are petty and accidental uses; just as if a stronger race were to kill us in order to make buttons and flageolets of our bones.

—Henry David Thoreau¹⁶

and a series of others on the same topic can also be found in *MANAGING THE COMMONS*, *supra* note 8.

13. Ostrom & Ostrom, *A Theory for Institutional Analysis of Common Pool Problems*, in *MANAGING THE COMMONS*, *supra* note 8, at 157.

14. Hardin, *supra* note 12, at 1243.

15. Economic dependence will cause economic exploitation to be extended beyond the point at which it is profitable. One recent report notes that Japanese whaling survived in 1978 only because of a \$10 million government subsidy after the Taiyo Fisheries Company, which owns 30% of the Japan Joint Whaling Company, lost \$20 million in its whaling operations. ANIMAL WELFARE INSTITUTE INFORMATION REPORT, Feb.-Mar. 1979, at 1. This is a natural political consequence of economic exploitation and dependence, but it is ignored by an economic model concerned only with numerical value. Its impact will become more serious as the demands of the environment push more tightly on our economic systems. This is one example of the political deficiencies of a purely economic model of environmental relationships.

16. Cited in Scarff, *supra* note 7, at 340.

One can readily agree with Thoreau's sentiments, but it is more difficult to translate them into an operational reality. What follows is an attempt to explain the basis of an "ecological" approach to man's relation with nature and, specifically, whales.

Under the economic approach the market values which Thoreau rejects determine the "value" of the resource. Resources are seen as interchangeable with one another according to their market value. As a result, in the search for an economy's equilibrium, extinction does not necessarily pose any economic costs. Such calculations lead to overexploitation of nature, with threats of extinction on a vast scale.¹⁷

In contrast, the ecological approach takes the need for long-term environmental preservation and balance as its starting point. Ecology is the science that studies the interactions of interdependent organisms and natural forces,¹⁸ and its lessons are embraced by those who recognize the need for the human population to live in balance with the global ecosystem that supports it. Although this need is self-evident, its implications at this stage in history are not so easy to accept. In an environmentally based regime, the carrying capacity of the environment, rather than the forces of the market, would set the limits for the extraction of the resource, the extent of its production and consumption, the nature of its distribution, and the absorption of its wastes. The ramifications of the ecological system extend to the roots of our economic, and hence political, systems.

The concern for natural balance manifests itself both in the need to protect the productivity of specific ecosystems and in the need to maintain a rich global diversity. The interest in ecosystem protection and productivity is relatively new, and, not surprisingly, it challenges the traditional exploitation strategies.¹⁹ Stable ecosystems are presum-

17. Many species of land and marine animals other than the whale are threatened. It is estimated, for example, that the massive economic overexploitation of tropical rainforests will cause the extinction of 500,000 species of plants and animals within the next 20 years. See Hornblower, *Tropical Forests—A Threatened Resource*, *The Guardian Weekly* (Manchester), May 13, 1979, at 20, col. 1.

18. For a recent general text on ecology, see R. MAY, *THEORETICAL ECOLOGY: PRINCIPLES AND APPLICATIONS* (1976). See also Young, *Environmental Law: Perspectives from Human Ecology*, 6 ENV'T L. 289 (1976).

19. The traditional exploitation approach is based upon "maximum sustainable yield" (MSY). Because it disregards interspecies interactions, MSY is far less reliable than a multiple species approach such as "optimum sustainable population" (OSP). For a more detailed discussion, see S. HOLT & L. TALBOT, *NEW PRINCIPLES FOR THE CONSERVATION OF WILD LIVING RESOURCES* (Wildlife Monograph No. 59, 1978); Scarff, *supra* note 7, at 390-94. OSP was first introduced as a management strategy in an American statute, the Marine Mammal Protection Act of 1972, 16 U.S.C. §§ 1361-1407 (1976). The choice between MSY and OSP is always contested by exploitation interests. See Scarff, *supra* note 7, at 387-400.

ably the most productive over the long term,²⁰ yet they require political and legal protection to withstand the pressures of short-term economic calculations.²¹ Similarly, there is need to maintain a rich, diversified, and resilient global environment. It is a premise of ecology that diversity is most conducive to stability and adaptability. Thus, every species removed from the global pool weakens the total ecosystem that supports man.

As an integral component of a stable ecosystem, a healthy whale population would continue *ad infinitum* as a valuable resource. Only the self-contained logic of the economic paradigm could maximize the value of a resource by destroying it. In view of our vast ignorance of the contribution of the great whales to global ecological diversity, it would be dangerous to destroy them.

The ecological approach to resource use begins, therefore, with the needs of the biological world. As we have seen, these needs are not encompassed by economic²² or national interests, and thus an ecological approach inevitably relies upon a legal and political structure of protection and control. This Perspective discusses how the legal and political foundations of the ecological approach might be laid.

Contemporary conceptions of justice require that the freedoms that one individual may exercise should not restrict the exercise of like freedoms by others. Although the present generation has the power to denude the earth and pass a barren globe to future inhabitants, who are powerless to stop us now or punish us later, there is no justification for

20. In testimony concerning the dangers of overexploitation of Antarctica, one scientist vividly depicted the dangers of ignoring ecosystems interactions:

The authors of the study found that in the presence of healthy sea otter populations, the ocean environment was highly productive and supported many species of fish and a healthy Aleut population.

Overkill of the otters by the Aleuts caused a shift in the ecosystem towards species that were not as useful to man as those supported by the presence of the sea otter. Instead of fish, otters, birds, and kelp beds, the Aleuts were left with urchins and limpets, none of which they could eat. Of course, the Aleuts had to move elsewhere.

Antarctic Living Marine Resources Negotiations: Hearings Before the Senate Committee on Commerce, Science and Transportation, 95th Cong., 2d Sess. 26 (1978) (statement of Ariel Lugo, Staff Member, International and Scientific Affairs, Council on Environmental Quality) [hereinafter cited as *Hearings*].

21. One recent book canvasses the various issues involved in the preservation of species for ecological stability and places this concern in a larger economic and political context. See N. MYERS, *THE SINKING ARK* (1979).

22. Unlike traditional economics, the evolving economics of ecology explicitly recognizes the primacy of its physical and political foundations. See, e.g., H. DALY, *STEADY-STATE ECONOMICS* (1977). This school views economic activity itself as a cost, a "through put" of energy and resources, in the service of a benefit, the maintenance of a stock of wealth. The goal of this approach is to maintain the stock with a minimum of "through put." Steady-state economics is based simply upon the premise that renewable resources should be maintained in a renewable state.

treating future generations any less justly than the present generation.²³ Willfully to destroy a resource that could otherwise sustain countless generations, and in the process to weaken the basis of ecological stability upon which all will be dependent, is, by this standard, manifest injustice. It provides the most arbitrary of foundations for present legal rights and obligations.²⁴

In contrast, the recognition that the earth is held in trust for future generations requires that present demands, however defined, be balanced against those of the future. Balancing interests would have two important effects. First, it would shift the onus of justification onto the exploiter and away from the conserver. The exploiter would have to show that his actions are compatible with the legitimate claims of others. Second, wherever conflicting interests are involved, *needs*, rather than *preferences*, would be balanced. Thus, it would be necessary to arrive at some criteria for decision which will protect the most "essential" or "important" uses.²⁵ In this light, the issue becomes not "why save the whales?" but "what justification can there be for destroying them?"

Because present economic demand is not a sufficient criterion for balancing interests, decisionmakers must explicitly address underlying values. This is exactly what the political process is designed to do. A closer examination of this process applied to whales will allow us later to develop a basic "hierarchy of needs." For the present, however, it is sufficient to discuss in broad outline the essential nature of the conflict we confront—the conflict between the interests of present consumption

23. See J. RAWLS, A THEORY OF JUSTICE 284-93 (1971). See also Hubin, *Justice and Future Generations*, 6 PHILOSOPHY AND PUB. AFF. 70 (1976). For a discussion of the implications of intergenerational equity for economic "efficiency," see Sandler & Smith, *Intertemporal and Intergenerational Pareto Efficiency: A Comment*, 4 J. ENV'T'L ECON. & MANAGEMENT 247 (1977); Sandler & Smith, *Intertemporal and Intergenerational Pareto Efficiency Revisited*, 4 J. ENV'T'L ECON. & MANAGEMENT 252 (1977). Sandler and Smith are severely critical of contemporary economic methods of calculation. The change proposed by the authors, however—putting all generations on an equal footing—is basically a legal and political, rather than economic, response. This change also has significant implications for distribution within present generations. Ecological balance is probably incompatible with significant distributional inequalities, in the absence of great repression.

24. One effect of destroying resources is to limit the freedom of future generations. The reduction in the diversity of nature and in the capacity of the environment to absorb natural changes requires increased regulation of all aspects of life. Even so, considering the depth of human fallibility and vulnerability, no artificial system (even the most rigorously repressive one) can provide the security equal to that of a healthy and resilient environment. This truth is too often ignored by a technocracy confident in the capacities of human reason. For a thoughtful and moving discussion of the profound error underlying this faith, see W. BARRETT, *THE ILLUSION OF TECHNIQUE* (1978).

25. Steady-state economists define limits by reference to "ultimate needs" and "ultimate means." See H. DALY, *supra* note 22, at 18-31. In comparison, neoclassical economics ignores issues of equitable distribution and "values," deferring instead to supposedly autonomous "preferences" (demand) that reflect the existing distribution of wealth and power.

and those of all other uses. Present resource consumption must be rationalized and controlled.

At the heart of the ecological debate is the need for scarce resources to be allocated according to a whole spectrum of social needs, not simply according to the limited criteria of economic efficiency. For example, ecosystem maintenance, resource preservation, and subsistence needs might all take priority over the survival or profitability of an industry.²⁶ This scale of values is markedly different from that which exists at present. Continued whale exploitation follows not from any need for whale products²⁷ but from the interests of the industry and from a concept of economic efficiency based only on present preferences rooted in the existing distribution of wealth. According to an ecological assessment, exploitation premised on such narrow foundations is arbitrary, unjust, and dangerous.

Parallel to the need to justify present consumption interests in the face of competing long-term interests is the increasingly recognized importance of nonconsumptive interests. These too are inadequately measured by the traditional economic calculus, which is concerned with nonconsumptive interests only to the extent that they generate income.²⁸ In the economic calculus, the level of consumption can be reduced only when income generated by nonconsumptive uses competes with that generated by consumption. Although nonconsumptive benefits have increased in recent years,²⁹ they have been derived largely from presently unexploited whale populations and thus have not benefitted exploited populations. In addition, nonconsumptive income in the future is not considered; yet it is precisely such income that is beginning to develop now that the limits of consumption, and of the satisfaction associated with it, are reached.

26. See text accompanying notes 414-16 *infra*.

27. For a detailed discussion of the adequacy of substitutes for whale products, see FRIENDS OF THE EARTH, WHALE MANUAL '78, at 120-26 (1978) [hereinafter cited as WHALE MANUAL '78]; S. FROST, 1 WHALES AND WHALING, REPORT OF THE INDEPENDENT INQUIRY FOR THE GOVERNMENT OF AUSTRALIA 126-39 (1978) [hereinafter cited as WHALES AND WHALING]. The small amount of whale meat consumed in Japan accounts for less than 0.5% of the total Japanese protein intake and a very few percent of their meat protein. This latter amount is far higher than the Japanese people themselves desire, as there are strict quotas on much-preferred beef. The mainstay of the whaling industry throughout most of the 1970's, the sperm whale, is desired not for its meat but for its oil, used largely in tanning leathers. A multitude of substitutes for this exists, including the much-touted jojoba bean.

28. The essence of the environmental experience is the direct relationship between man and nature. Income, however, is generated only to the extent that this experience is mediated by others, and this explains the rapid commercialization of attractive environmental habitats. Such commercialization, in turn, undermines the direct experience that alone can generate ecological consciousness.

29. Scarff cites estimates for nonconsumptive and low-consumptive monetary values in 1976 of \$225 million and for consumptive values in 1972 of \$100 million. Scarff, *supra* note 7, at 342.

Finally, while traditional economics assumes the substitutability of resources, nonconsumptive values are not so interchangeable. This realization justifies the preservation not only of whales but of the entire range of natural assets. Some recent commentators have thus argued that natural objects and wildlife should be given the right to be represented in human dealings and that wildlife should be given legal rights.³⁰

Environmental concerns are being advanced in those countries where the continual need to exploit only for survival has been transcended. In many areas of the world, man has achieved freedom on a scale never previously attained. New ecological values have surfaced at this time to confront a conditioning and an institutional structure that encourages yet more consumption and struggle against nature. The need for ecological balance is indisputable. The contemporary confrontation in values involves a decision: how rich, how barren, how wondrous, how merely life sustaining will our human environment be?

The environmental movement is proof that a change in perceptions about nature is occurring. Much environmentally protective national legislation has been enacted,³¹ and international treaties to protect plants, animals, and habitats are proliferating.³² The 1979 Bonn Convention on the Conservation of Migratory Species of Wild Animals summarized in its preamble the concerns underlying these developments:

THE CONTRACTING PARTIES [are]

AWARE that each generation of man holds the resources of the earth for future generations and has an obligation to ensure that this legacy is conserved and, where utilised, is used wisely: [and]

CONSCIOUS of the ever-growing value of wild animals from environmental, ecological, genetic, scientific, aesthetic, recreational, cultural, educational, social and economic points of view.³³

Preservation of wildlife also requires preservation of the wildlife's habitat; thus, to save the whales we must also preserve the seas.³⁴

The concerns expressed in the treaty justify preserving all types of natural assets, including whales. Yet even within the general concern for preserving species, whales are given special recognition. Often they

30. See C. STONE, SHOULD TREES HAVE STANDING? (1974); Favre, *Wildlife Rights: The Ever-Widening Circle*, 9 ENV'T L. 241 (1979).

31. See text accompanying note 119 *infra*.

32. Perhaps most notable is the 1973 Convention on International Trade in Endangered Species of Flora and Fauna, 27 U.S.T. 1087, T.I.A.S. No. 8249 [hereinafter cited as CITES]. See text accompanying notes 349-54 *infra*. Most recently, see the Bonn Convention on the Conservation of Migratory Species of Wild Animals, 5 ENV'T L. AND POL'Y 156 (1979) [hereinafter cited as Bonn Convention].

33. Bonn Convention, *supra* note 32, preamble.

34. This issue is central to the planned exploitation of the Antarctic.

are treated separately.³⁵ Steady-state economist Herman Daly cites whales as a symbol of an "ultimate end."³⁶ This special fascination with whales has arisen for many reasons. There are biological features that make these animals particularly vulnerable. Also, man has revered these animals for centuries. Their calm and aware personalities have long attracted man's sympathies. The Greeks worshipped dolphins as the saviors of man.³⁷ In *Moby Dick*, Herman Melville saw in the sperm whale the deepest reflections of the human spirit—and a common fate. Today, anatomical and behavioral studies have revealed that these creatures are highly developed and may be considered as "thinking animal[s] capable of displaying significant 'intellectual abilities'."³⁸

Therefore, preservation of whales can be justified on many grounds. In the conflict between economics and ecology it is perhaps in the role of exemplars of the new ethic of man and nature that whales may finally be recognized and given a reprieve:

In the end, the question of our treatment of whales involves more than correct scientific method, more than the simple matter of their survival. Ultimately it is a moral question that involves the purpose to which man puts his spiritual energy. To slaughter these creatures, about which we know so little, to justify with tendentious statistics the turning of breath into blood, argues for our own extinction as much as that of our victims. . . . For a long time now man's awe has been confined to his own capacity for self-destruction. Perhaps it is time he fastened some of it on creatures like the whale, beings that enhance our capacity to revere life.³⁹

35. See, e.g., Bonn Convention, *supra* note 32, art. V(4)(f), at 157. The entire order *Cetacea* is listed in appendix II of CITES, *supra* note 32, 27 U.S.T. at 1132. The United Nations Environment Programme (UNEP) is preparing a plan of action for the conservation of marine mammals, including all cetaceans. Marine mammals have been a special concern of the Food and Agricultural Organization since 1975.

36. H. DALY, *supra* note 22, at 20.

37. For an excellent discussion of cetaceans in mythology, see Doria, *The Dolphin Rider*, in *MIND IN THE WATERS: A BOOK TO CELEBRATE THE CONSCIOUSNESS OF WHALES AND DOLPHINS* 33-51 (J. McIntyre ed. 1974) [hereinafter cited as *MIND IN THE WATERS*].

38. J. Fortom-Gouin, *Some Aspects of Cetacean Neuroanatomy*, Doc. FAO/ACMRR/MM/SC/134 (Sept. 1976) (Submission to the Bergen Consultation on Marine Mammals). Many scientists are working on this issue now. Their work is sympathetically considered in *WHALES AND WHALING*, *supra* note 27, at 147-71, 317-24; S. FROST, *2 WHALES AND WHALING, REPORT OF THE INDEPENDENT INQUIRY FOR THE GOVERNMENT OF AUSTRALIA* 161-217 (1978). That human-cetacean communications have not progressed further could be attributed to man's linear thought processes as much as a lack of cetacean intelligence. See Brunnell, *The Evolution of Cetacean Intelligence*, in *MIND IN THE WATERS*, *supra* note 37, at 52-66. Work on cetacean intelligence, though still in its earliest stages, has attracted growing interest and support. See J. LILLY, *LILLY ON DOLPHINS* (1975).

39. Richardson, *An Oppressed Group*, NEW YORK REV. BOOKS, July 14, 1977, at 26, 27, col. 2. In recent testimony before the Australian Inquiry on Whales and Whaling, the noted whale scientist Dr. Victor Scheffer succinctly summarized the role the whale might play in the future consciousness of man: "If I understand what men and women are saying today about whales it is 'Let them be.' A useful whale, they say, is one out there somewhere in the

Not surprisingly, therefore, whales have come to symbolize the values of the "ecological ethic": respect for and deference to nature independent of its function as a "resource" for human manipulation.

III

HISTORY OF WHALING AND ITS CONTROL

A. Early History

Whaling has an ancient history which has been widely recounted.⁴⁰ European whaling dates from the Middle Ages when whales were hunted from the coast. In the eighteenth century, high seas whaling fleets with onboard processing facilities (referred to as pelagic fleets) scoured the North Atlantic. Right and humpback whales were too slow to evade capture and were soon decimated. In the nineteenth century, the sperm whale industry flourished and provided the much-prized sperm oil. *Moby Dick* soon became folklore. With the introduction of the steam boat in the 1860's and the exploding harpoon gun soon thereafter, even the faster blue, fin, and sei whales could be killed. By the end of the nineteenth century, the waters of the Northern Hemisphere, once alive with huge cetacean populations, were deserted.

The introduction of the large factory ship in 1903 launched whaling into the era of large-scale, long-distance pelagic operations. These operations remained largely unregulated until the 1930's. A League of Nations report strongly recommended protection for the whales in 1925, but to no avail.⁴¹ In 1930, at the urging of a nongovernmental organization, the International Council for the Exploration of the Sea, Norway established a statistical center to collect data on whale populations.⁴² Called the Bureau of International Whaling Statistics, this center continues to function as the central statistical source for whaling information. In 1931, at the "urgent" request of the Economic Committee of the League, a whaling regulation treaty was concluded in Geneva,⁴³ but the Convention for the Regulation of Whaling had minimal impact on conservation.⁴⁴ In fact, the only agreements that had any

wild—free, alive, hidden, breathing, perpetuating its ancient bloodline." 1 WHALES AND WHALING, *supra* note 27, at 189.

40. One of the most complete histories of whaling prior to the formation of the International Whaling Commission in 1946 is found in P. Bock, *A Study in International Regulation: The Case Of Whaling* (June 1966) (dissertation published by University Microfilms, Ann Arbor, Michigan). Much of the information in the present section comes from Bock as well as from the WHALE MANUAL '78, *supra* note 27, at 87-91.

41. Suarez, *Report on the Exploitation of the Products of the Sea*, 20 AM. J. INT'L L. (Supplement) 231, 235-236 (1926).

42. P. Bock, *supra* note 40, at 80.

43. Convention for the Regulation of Whaling, Sept. 24, 1931, 49 Stat. 3079, T.S. No. 880, 155 L.N.T.S. 349.

44. The Agreement for the Regulation of Whaling and Final Act, June 8, 1937, 52 Stat. 1460, T.S. No. 933, 190 L.N.T.S. 79, and the Protocol amending the International Agree-

effect were a series of voluntary industry production agreements concluded in the 1930's that controlled the amount of whale products entering the market⁴⁵ but did not require conservation. For example, the "blue whale unit" (BWU) was created as a quota measurement unit, but it ignored the needs of each whale species by combining all whales into one total catch limit. The value accorded to each type of whale was determined by its oil production potential as compared to that of blue whales, so that three humpbacks, for example, equalled one blue whale. In the 1938-39 season, 45,771 whales of all types were slaughtered.⁴⁶

Modern efforts to regulate whaling began at the end of the Second World War. At a conference held in Washington in 1946, the International Convention for the Regulation of Whaling⁴⁷ was signed, creating the IWC. Although Norway, the United Kingdom, and Japan were the three leading whaling nations in the last season before the war, it was the United States that took the lead both in organizing the conference and in presenting proposals for the new convention.⁴⁸

Two basic objectives probably were responsible for this involvement by the United States. First, with the withdrawal of wartime industry, capital for private investment was badly needed in the world's war-ravaged economies. Whaling offered a "free" resource that could provide both valuable consumption goods (meat and oil) and a profitable capital return. It was probably for these reasons that General MacArthur, despite strong European protests, authorized the re-entry of Japan into Antarctic whaling in 1946.⁴⁹

The second objective underlying the American involvement with the postwar whaling industry was linking the industry to an international organization. Such organizations were an integral part of the postwar American political strategy, and for good reason. No longer itself a major whaling nation, the United States could have a say in the global whaling industry through its involvement in an international organization. Indeed, Dean Acheson, in his address to the conference, described whales as a "truly international resource . . . the wards of the entire world."⁵⁰ This statement was an interesting precursor to later

ment and Final Act, June 24, 1938, 53 Stat. 1794, T.S. No. 944, 196 L.N.T.S. 131, were similarly ineffective.

45. Scarff, *supra* note 7, at 350.

46. 1 WHALES AND WHALING, *supra* note 27, at 29.

47. International Convention for the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, T.I.A.S. No. 1849 [hereinafter cited as 1946 Whaling Convention].

48. P. Bock, *supra* note 40, at 126-27.

49. The United States-Japan relationship was quite symbiotic. The United States financed the Japanese expeditions and was paid with valuable whale oil. The Japanese kept the meat for domestic consumption. P. Bock, *supra* note 40, at 165.

50. Address by Dean Acheson to IWC Plenary Session, Nov. 20, 1946, *printed in* P. Bock, *supra* note 40, at 121.

arguments that whales should be considered the "common heritage of mankind."⁵¹ Moreover, by constructing an international organization, the United States could draw Japan into the larger economic system while also exercising some control over the activities of the newest whaling nation, the U.S.S.R. To this end, the United States unsuccessfully sought to have the IWC incorporated into the United Nations framework, specifically into the Food and Agriculture Organization (FAO).⁵² The American proposals were not, however, intended to grant any substantive legal control to a formal international body. The United States and others insisted both that all members be empowered to reject any recommendations of the Commission and that the Commission itself not have broad powers.⁵³ The fate of the whales was once again to be determined by bargains between larger economic and political interests.

B. The International Convention for the Regulation of Whaling (1946)

The convention's preamble set out the goals for the IWC and hinted at the conflicts to come. The preamble recognized a conservation interest in safeguarding whales for future generations, but only as "great natural resources."⁵⁴ It is therefore not surprising that the convention's original signers felt that their "common interest"⁵⁵ in preserving whales was only "to achieve the optimum level of whale stocks as rapidly as possible without causing widespread economic and nutritional distress."⁵⁶ The purpose of the convention was "to provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry."⁵⁷

The goals of the convention were to be implemented by the IWC. The convention provided for the appointment of a Secretary and staff

51. See text accompanying notes 403-05 *infra*.

52. P. Bock, *supra* note 40, at 129-30, 133. The 1946 Whaling Convention provides only for possible affiliation. See text accompanying note 58 *infra*; P. Bock, *supra* note 40, at 145.

53. P. Bock, *supra* note 40, at 126-27.

54. 1946 Whaling Convention, *supra* note 47, preamble, para. 2.

55. *Id.* preamble, para. 5.

56. *Id.* (emphasis supplied).

57. *Id.* preamble, para. 8. Most authors have seen the goals of conservation and industry development as essentially contradictory. See, e.g., Christol, Schmidhauser & Totten, *The Law and the Whale: Current Developments in the International Whaling Controversy*, 8 CASE W. RES. J. INT'L L. 149, 154 (1976). It is more likely, however, that conservation was seen only as a means to achieve the larger goal of industry development. Scarff notes that the treaty drafters may not actually have understood that there could be an inconsistency and so did not provide for resolution of conflicts between the goals. Scarff, *supra* note 7, at 354. This explanation is quite reasonable, for even today national delegations to the International Whaling Commission often fail to understand that industry's interests need not coincide with conservation.

and for possible institutional affiliation with the United Nations.⁵⁸ Its jurisdiction extended only to those states that accepted it, of which there have been between fifteen and twenty-three over the Commission's history. Through their appointed Commissioners, member states were to carry out the Commission's work at annual meetings. Under the Commission's Rules of Procedure,⁵⁹ the central working body was the Technical Committee. Scientific advice and recommendations to the Technical Committee were submitted by the Scientific Committee, which met prior to each meeting of the entire Commission. Important decisions were to be made by amending a set of regulations attached to the Convention (the Schedule).⁶⁰ Amendment required a three-fourths majority vote of the plenary after being forwarded by a simple majority of the Technical Committee.⁶¹

Article V outlined the types of Schedule amendments that could be made, including the setting of protected and unprotected species, open and closed seasons, size limits, and catch limits.⁶² The guidelines for such decisions severely restricted the potential efficacy of Schedule amendments:

These amendments of the schedule a) shall be such as are necessary to carry out the objectives and purposes of this Convention and to provide for the conservation, development, and optimum utilization of the whale resources; b) shall be based on scientific findings; c) shall not involve restrictions on the number or nationality of factory ships or land stations, nor allocate specific quotas to any factory ship or land station or to any group of factory ships or land stations; and d) shall take into consideration the interests of the consumers of whale products and the whaling industry.⁶³

Not only did the convention contain these broad restrictions, but the seemingly protective provision that amendments "shall be based on scientific findings" was a trap. Under article IV, the Commission was allowed to collect and disseminate data, but nowhere was a state required to provide such data before receiving a quota. As a result, this

58. 1946 Whaling Convention, *supra* note 47, art. III(1), (3), (6).

59. *Id.* art. III(2). These rules give great flexibility to the Chairman. For example, he can make decisions by polling the Commissioners by mail. INTERNATIONAL WHALING COMMISSION, RULES OF PROCEDURE AND FINANCIAL REGULATIONS 4 (1979) [hereinafter cited as RULES OF PROCEDURE]. Any decisions of the Chair can be overturned by a majority of the Commissioners. *Id.*

60. *See* 1946 Whaling Convention, *supra* note 47, arts. I, IV, V.

61. RULES OF PROCEDURE, *supra* note 59, at 4. The Technical Committee discussions and recommendations provide the groundwork for decisions by the whole Commission in plenary session.

62. 1946 Whaling Convention, *supra* note 47, art. V, para. 1.

63. *Id.* art. V, para. 2. As will be seen, these restrictions have been devastating to the whales. That these restrictions were included within the convention itself is not surprising, because there was no state present in 1946 which was seriously interested in taking up the conservationist cause.

provision in practice meant that the onus was on anyone seeking lower quotas to prove the need for them scientifically, while high quotas could remain in force indefinitely without scientific justification.⁶⁴

Finally, each state could avoid being bound by Schedule amendments by "objecting" within ninety days.⁶⁵ The United States had insisted on this provision in 1946, ever concerned not to sacrifice any national sovereignty.⁶⁶ The provision creates not a simple regulatory process but one in which political bargaining based on larger considerations of policy and power would be all-important in actual decision-making.⁶⁷

The true test of international legal arrangements is enforcement; here too, with U.S. assistance,⁶⁸ the convention was weak.⁶⁹ Although the convention directed that prosecutions for violations "shall" be instituted⁷⁰ and that information regarding prosecutions should be transmitted to the Commission,⁷¹ "appropriate measures to ensure the application of the provisions . . . and the punishment of infractions" were left to each flag state.⁷² Because there was no international inspectorate to oversee the whaling operations, there was also no guarantee that the convention would be respected.

64. The convention recognizes the importance of scientific data, but requires only that the "Contracting Governments will take all practicable measures to obtain such data." *Id.* art. VIII(4). Failure to do this does not affect other rights under the convention.

65. *Id.* art. V, para. 1. Another loophole was provided by article VIII, which allowed contracting governments to issue themselves "scientific permits" to kill any whales they saw fit "for purposes of scientific research," with only the duty to transmit to the Commission the data obtained "insofar as practicable." *Id.* art. VIII(3). See also text accompanying notes 165-68 *infra*.

66. P. Bock, *supra* note 40, at 213-14.

67. Objection procedures are common in fisheries treaties. Some feel that, given the interests of states in protecting their sovereignty at all costs, the objection procedure is preferable to the alternative of consensus (unanimous) decisionmaking. With the longer life cycle and slower reproductive rates of whales, however, overexploitation is detected later and recovery is slower than with fish. Thus, the objection procedure is particularly dangerous when applied to whaling. See generally, A. KOERS, *INTERNATIONAL REGULATION OF MARINE FISHERIES* 194-199 (1973).

68. Tom Garrett, Deputy Commissioner on the United States delegation to the IWC in recent years, noted that a 1945 proposal by the United States to include serious economic sanctions in the convention in order to prevent trade in whaling equipment with nonmembers was withdrawn by the State Department because it was "contrary to the spirit of free enterprise." In fact, as it turned out, "certain American investors were at that time negotiating with Aristotle Onassis for a revival of United States flag whaling." *A Time of Maximum Peril*, ANIMAL WELFARE INSTITUTE INFORMATION REP., Oct.-Dec. 1976.

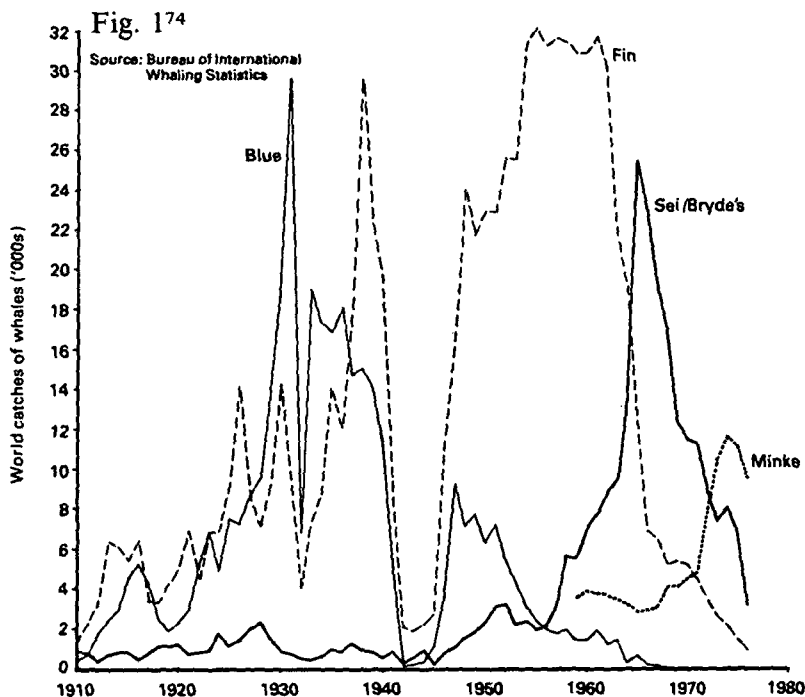
69. For a detailed discussion of enforcement problems in another international environmental area, see R. M'GONIGLE & M. ZACHER, *POLLUTION, POLITICS, AND INTERNATIONAL LAW: TANKERS AT SEA* (1979), especially chs. 6 & 8 [hereinafter cited as M'GONIGLE & ZACHER].

70. 1946 Whaling Convention, *supra* note 47, art. IX, para. 3.

71. *Id.* art. IX, para. 4.

72. *Id.* art. IX, para. 1. The convention does prohibit bonuses paid to gunners for whales taken contrary to its provisions. *Id.* art. IX, para. 2.

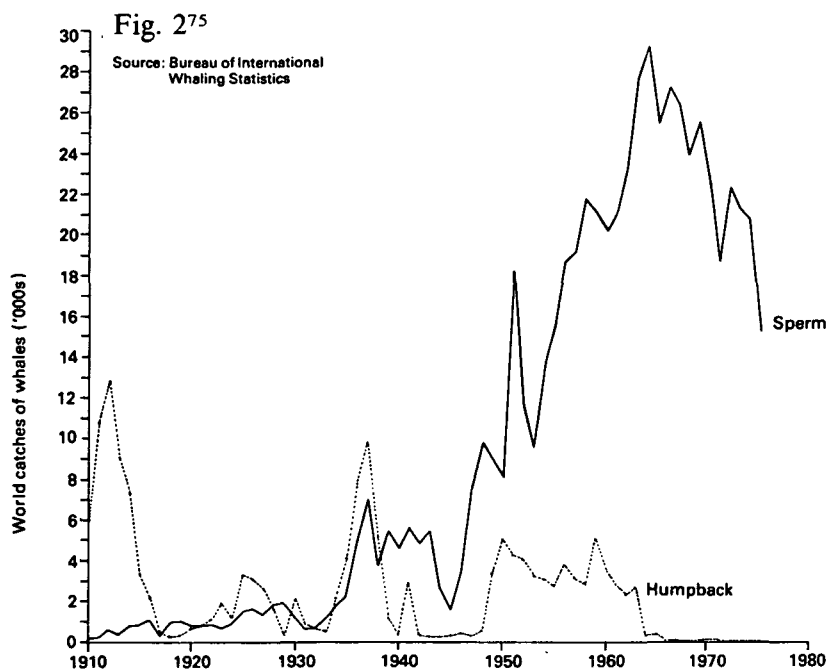
As figures 1 and 2 reveal, the fate of the whales under IWC management was to be little different from their treatment before international legal regulation.⁷³



73. These graphs (and the quotas of the IWC) are concerned with the "great whales," the large baleen and toothed whales. Smaller cetaceans are not considered here. A variety of population estimates for these can be found in Mitchell, *The Status of the World's Whales*, NATURE CANADA, Oct.-Dec. 1973, at 9-25; L. Talbot, History, Status, and Conservation Problems of the Great Whale Populations (Feb. 24, 1974) (paper delivered at Symposium on Endangered Species: Causation and Remedies, Session on Cetaceans, Annual Meeting of the American Association for the Advancement of Science). These figures are not listed here because of their highly speculative nature.

74. 1 WHALES AND WHALING, *supra* note 27, at 32.

75. *Id.* at 33.



C. The History of the International Whaling Commission: 1946 to 1972

The Schedule to the convention, as adopted at the 1946 conference, included several restrictions.⁷⁶ Some whales—right, gray, and humpback—were already so depleted that they were specifically protected.⁷⁷ Other more general restrictions were set, most notably a time limit for the Antarctic season of December 15 to April 1. For this period, a very high quota of 16,000 BWU's was set.⁷⁸

The effect of the limitations was exactly the opposite of encouraging conservation. By establishing a time limit to the season, the limitations encouraged each nation to develop the most efficient vessels and killing techniques possible to maximize its share of the Antarctic quota. The result was an intensely overcapitalized industry with each nation vigorously competing with the others. Whalers called it "the Whaling Olympic."⁷⁹ It was a classic demonstration of "the tragedy of the commons."⁸⁰ Without any species distinction provided by a quota set in BWU's, almost any whale in the harpooner's path was a ready target. The race was on.

76. 1946 Whaling Convention, *supra* note 47, Schedule.

77. *Id.* paras. 2, 6.

78. *Id.* para. 8(a).

79. G. SMALL, *THE BLUE WHALE* 91 (1971).

80. See text accompanying notes 12-15 *supra*.

The first annual meeting of the Commission was convened in 1949. At that time, in addition to renewing the quota of 16,000 BWU's,⁸¹ the Commission voted to remove the protection for the Antarctic population of humpback whales.⁸² Although it set a special species quota of 1,250 on these whales, now famous for their songs, 2,117 of them were killed that year.⁸³ Similar quotas were set in subsequent years despite protests from the Scientific Committee that the populations of blues and humpbacks were being depleted rapidly. When a five-year moratorium on killing blues and humpbacks in northern waters finally was passed by the Commission in 1954,⁸⁴ virtually every whaling nation filed an objection.⁸⁵ The Antarctic quota was set at 15,500 BWU's.⁸⁶ Despite warnings that the whale "capital" was being consumed, the process continued.

In fact, no control was possible. When the British Commissioner proposed in 1958 that the "Whaling Olympic" be brought under control by limiting catching material and dividing the quotas between the Antarctic exploiters, the IWC was thrown into chaos. Two of the most uncompromising whaling nations, Norway and the Netherlands, withdrew from the Commission, and others refused to cooperate without the participation of these nations. No IWC quotas were set in 1959, and the "self-imposed" quotas of the whaling nations totalled 17,600 BWU's.⁸⁷ The situation was out of hand. Again in 1960, no quotas were set, and the Commission appointed a "Committee of Three" scientists to evaluate the Antarctic situation.⁸⁸ In that year, the catch was 16,433 BWU's, of which only 1,740 were blue whales.⁸⁹ Of these, seventy-one percent were immature, dying before they had time to reproduce. With their disappearance, the industry was now forced to fill its quota with fin and the much smaller sei whales.

In 1962, the pelagic whaling nations reached a private agreement outside the Commission on the national allocations of the total quota.

81. See [1949-1950] FIRST REP. COMM'N 15 (Int'l Comm'n on Whaling).

82. *Id.* at 5, 15.

83. *Id.* at 8.

84. [1954-1955] SIXTH REP. COMM'N 15-16 (Int'l Comm'n on Whaling).

85. The pelagic whaling nations were Japan, the United Kingdom, the U.S.S.R., Norway, and the Netherlands. Shore whaling was carried on by Australia, Canada, Denmark, Iceland, New Zealand, South Africa and the United States. Objections were filed by Denmark, Iceland, Japan, the Soviet Union, the United States, and Canada. *Id.* at 5.

86. A proposal to reduce the quota by 500 BWU's was rejected by the Commission. *Id.* at 17. Reductions in the quota were not approved until 1955. [1955-1956] SEVENTH REP. COMM'N 19 (Int'l Whaling Comm'n).

87. A good account of this crisis is found in P. Bock, *supra* note 40, at 210-23.

88. [1960-1961] TWELFTH REP. COMM'N 7-8 (Int'l Comm'n on Whaling). The three scientists, Dr. D.G. Chapman of the United States, Dr. Sidney Holt of the FAO, and K.R. Allen of New Zealand, are all still attendants at the Commission. The committee was later enlarged to four with the inclusion of Dr. John Gulland of the FAO.

89. WHALE MANUAL '78, *supra* note 27, at 26.

With their return to the Commission, it was able to resume its task of setting quotas. The 1962-63 quota was set at 15,000 BWU's.⁹⁰ This quota was extremely high in view of the perceived conditions of the whale populations, as the Committee of Three was quick to point out. In 1963, the committee urged that the BWU be abandoned and replaced by a quota for each species and that lower limits be set on fin whales,⁹¹ which were the whalers' primary target now that the blue whale population was largely depleted. Both recommendations were rejected, but a somewhat lower quota of 10,000 BWU's was set.⁹² This was the first substantial cut in the quota since 1946, but it was acceptable only because it represented the maximum quota the industry could get. The catch that year was only 8,429 BWU's.⁹³

At this time, pelagic whaling began to change in other ways. In 1963 and 1964, the United Kingdom and the Netherlands withdrew from the industry, selling their fleets and quotas to Japan.⁹⁴ Japan was left with fifty-two percent and the Soviet Union with twenty percent of the IWC quota.⁹⁵ Despite declining whale populations, these nations had added seven factory ships to their fleets between 1956 and 1962,⁹⁶ indicating an intention to continue the hunt to the end. The need to reap a return from their investments guaranteed aggressive exploitation for years to come despite strong evidence of declining populations. In 1964, the Scientific Committee recommended the equivalent of a 2,833 BWU's quota,⁹⁷ and the nonpelagic whaling nations sought a stepped reduction in the quota to 2,000 BWU's by 1966.⁹⁸ Disagreements again prevented the acceptance of the official quota, and an unofficial quota was agreed upon after the meeting only by accepting the figure of 8,000

90. [1962-1963] FOURTEENTH REP. COMM'N 16 (Int'l Comm'n on Whaling).

91. *Report of the Committee of Three*, *id.* at 39, 40-41.

92. [1963-1964] FIFTEENTH REP. COMM'N 17 (Int'l Comm'n on Whaling).

93. WHALE MANUAL '78, *supra* note 27, at 27.

94. P. Bock, *supra* note 40, at 162-63.

95. WHALE MANUAL '78, *supra* note 27, at 28.

96. In the 1955-56 season, the U.S.S.R. operated one factory ship and Japan operated three. [1955-1956] SEVENTH REP. COMM'N 7 (Int'l Comm'n on Whaling). By the 1961-62 season, the number of Japanese factory ships had increased to seven and the number of Soviet factory ships had increased to four. [1961-1962] THIRTEENTH REP. COMM'N 4 (Int'l Comm'n on Whaling).

97. *See Report of the Scientific Committee*, [1963-1964] FIFTEENTH REP. COMM'N 26, 37 (Int'l Comm'n on Whaling). The committee recommended quotas of no more than 4,000 fin whales and 5,000 sei whales. Blue Whale Units are calculated on the basis that one blue whale equals two fin whales, three humpback whales, or six sei whales. 1946 Whaling Convention, *supra* note 47, Schedule, para. 8(b).

98. [1964-1965] SIXTEENTH REP. COMM'N 17 (Int'l Comm'n on Whaling). The previous year, the report of the Scientific Committee stated that "whatever the economic considerations, the Committee's members, as scientists, believe that there is no justification for increasing the serious risk of extinction of the main stock of the largest living animal." *Report of the Scientific Committee*, [1963-1964] FIFTEENTH REP. COMM'N 32 (Int'l Comm'n on Whaling).

BWU's.⁹⁹

This dismal history is not surprising. The Commission itself, in Peter Bock's words, "occupie[d] several filing cabinets and shelves in one room of the Ministry of Agriculture and Fisheries in Whitehall."¹⁰⁰ In effect, there was no "commission" at all. Moreover, at the annual meetings at which decisions were made, the Scientific Committee had no power; responsibility, therefore, fell on the member nations. Yet who could lead? When a majority of members agreed to restrictions, objections routinely were filed by the same officials who had attended the meeting. Only if a country had been so committed to conservation that it would have been willing to carry the case beyond the Commission into diplomatic channels would there have been any possibility of control. There was, however, no national interest to be furthered by conservation, especially because the same actors who were preaching moderation in the Antarctic were themselves coastal whalers. Indeed, at the very time the United States was leading the proposal for a stepped reduction in the quota for the Antarctic, a California-based whaling company was completing the annihilation of a population of humpback whales that had flourished off the coast of Monterey for millennia.¹⁰¹ The quotas continued to fall year by year, but only after the catches had dropped before them.

The Antarctic was largely exhausted by 1965. The mighty blue whale had already disappeared when it was given "protected" status that year.¹⁰² The fin whale population was vastly depleted, leaving the sei and later the smaller minke whale and the sperm whale. The Antarctic season was shortened, but expeditions expanded into the North Pacific in order to increase profit by hunting the sperm whale.

With most whale populations depleted worldwide, these changes marked the last phase of pelagic whaling. Even at this late date, the organization that had presided over the industry's demise remained unchanged from the form established at its inception in 1946. The Blue Whale Unit was still being used despite continuous criticism of its unscientific character. Quotas consistently were set at levels higher than those considered biologically safe. No scheme to monitor whaling operations existed, even though one had been proposed as early as

99. [1964-1965] SIXTEENTH REP. COMM'N 3, 18 (Int'l Comm'n on Whaling).

100. P. Bock, *supra* note 40, at 150.

101. S. McVay, *Reflections on the Management of Whaling*, in *THE WHALE PROBLEM, A STATUS REPORT* 376 (W. Schevill ed. 1974). The kill averaged 147 whales per year from 1956 to 1959, but dropped to 55 in 1963, 27 in 1964, and 4 in 1965. See Christol, Schmidhauser & Totten, *supra* note 57, at 155-56. Today, many tourists come to Monterey to observe the migrating gray whales, the only great whale population to recover from a depleted state.

102. [1965-1966] SEVENTEENTH REP. COMM'N 18 (Int'l Comm'n on Whaling).

1955.¹⁰³ Thus, when the first quotas were set for sperm whales in the North Pacific in 1970,¹⁰⁴ it was still business as usual.

But the world outside the IWC was changing. Most notably a vociferous environmental movement was growing in the United States. It came too late to save the California humpback whale population, but in 1970 it forced the end of American whaling operations and achieved a ban on the importation of whale products into the country.¹⁰⁵ In other places, the whaling industry was also dying. Pressure from conservationists was building in individual countries, at the IWC itself, and in Stockholm at the United Nations Conference on the Human Environment.

D. The IWC in the Seventies

By the time of the Stockholm Conference in 1972, the outlook for the world's whales was bleak. Some whale populations were so depleted that they were possibly past the point of no return. Information about others was uncertain, yet they were still being hunted. A few species still appeared healthy, but these were beginning to be exploited heavily.

The Stockholm Conference confronted the problem, and in response to a proposal by the U.S. delegation,¹⁰⁶ unanimously adopted Resolution No. 33:

It is recommended that Governments agree to strengthen the International Whaling Commission, to increase international research efforts, and as a matter of urgency to call for an international agreement under the auspices of the International Whaling Commission and involving all governments concerned, for a 10-year moratorium on commercial whaling.¹⁰⁷

The focus of public attention and the approbation of the world were now directed to the International Whaling Commission. With the conclusion of the Stockholm Conference on June 16, 1972, the Secretary-General of the Conference flew to the annual meeting of the IWC (routinely held in late June) and personally delivered the resolution. That year, the Commission implemented an international observer scheme,¹⁰⁸ seventeen years after it had been first proposed in 1955, and

103. [1955-1956] SEVENTH REP. COMM'N 12 (Int'l Comm'n on Whaling).

104. [1970-1971] TWENTY-SECOND REP. COMM'N 21 (Int'l Comm'n on Whaling).

105. The whales are listed as endangered pursuant to the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1543 (1976). 50 C.F.R. § 17.11 (1979).

106. The extent to which the Stockholm Resolution reflected domestic U.S. policy will become clear when the United States legislation is examined at text accompanying notes 119-23 *infra*.

107. Report of the United Nations Conference on the Human Environment, UN Doc. A/CONF. 48/14 Rev. 1.

108. [1972-1973] TWENTY-FOURTH REP. COMM'N 27 (Int'l Comm'n on Whaling).

this change promised some marginal improvements in control.¹⁰⁹ Having served well to allow the depletion of the last remnants of heavily overexploited species, the BWU finally was replaced as the basis for quota-setting.¹¹⁰ For twenty years scientists had condemned the unscientific nature of this BWU, and their advice had been rejected. At last, separate quotas were to be established for each species and for different populations of each species. In the past, quotas were set only for Antarctic populations. Now, the Commission would also set quotas for populations in other areas.

The Stockholm Conference moratorium proposal was rejected, however, at the IWC in both 1972 and 1973. The United States pressed the proposal, but despite the proposal's majority approval in 1973, it narrowly failed to achieve the required three-fourths majority.¹¹¹

TABLE 1: VOTING ON MORATORIUM AT 1972 AND 1973 MEETINGS¹¹²

Country	1972			1973		
	For	Against	Abstain	For	Against	Abstain
Argentina	X			X		
Australia			X	X		
Canada			X	X		
Denmark			X			X
France			X	X		
Iceland		X			X	
Japan		X			X	
Mexico	X			X		
Norway		X			X	
Panama		X		X		
South Africa		X			X	
U.K.	X			X		
U.S.A.	X			X		
U.S.S.R.		X			X	
Total	4	6	4	8	5	1

A three-quarters majority vote is necessary for passage in plenary sessions.

Nevertheless, the climate for the Commission's activities had changed. No longer such a homogeneous group of whalers, the IWC began to reflect the basic contradictions between its two original objectives: conservation of whales and promotion of the whaling industry. This change was most evident in 1973. Despite the failure of the moratorium resolution, the Commission moved to restrict whaling in more traditional ways. It agreed to phase out the killing of Antarctic fin whales by 1976,¹¹³ to establish separate quotas for male and female

109. The observers are exchanged on a reciprocal basis so that the Soviet Union and Japan exchange with each other. This has been an obvious source of suspicion.

110. [1971-1972] TWENTY-THIRD REP. COMM'N 6 (Int'l Comm'n on Whaling).

111. [1973-1974] TWENTY-FIFTH REP. COMM'N 26 (Int'l Comm'n on Whaling).

112. WHALE MANUAL '78, *supra* note 27, at 31.

113. [1973-1974] TWENTY-FIFTH REP. COMM'N 27 (Int'l Comm'n on Whaling).

sperm whales,¹¹⁴ and to establish specific regions within the Southern Hemisphere in order to exercise greater control over each population.¹¹⁵ The IWC also refused to support an increase in the quota over the previous year's catch for the newest target, the small minke whales,¹¹⁶ and it reduced the quota of the industry's most recent staple, the sei whale.¹¹⁷ These measures were found to be too strict by Japan and the Soviet Union, and both filed objections to some of the restrictions.¹¹⁸

The objections were ill-considered and set off an intense protest. The U.S. Congress had recently passed legislation that contained serious sanctions against states violating international conservation regulations, including, most notably, the Pelly amendment to the Fishermen's Protective Act.¹¹⁹ Under this amendment, the United States could ban all fisheries imports from a country that had been certified to be "conducting fishing operations in a manner or under circumstances which diminish the effectiveness of an international fishery conservation program."¹²⁰ Although the Secretary of Commerce decided that an objection to IWC regulation was an action covered by the Pelly amendment, President Ford took no apparent action against the objectors.¹²¹ Nevertheless, the possibility of certification was itself a serious threat. The visible flouting of the IWC, once a matter of course for all concerned, was no longer an easy option. In addition to the discussions under the Pelly amendment, the objections sparked an

114. *Id.* at 28. Unlike the baleen whale, the toothed sperm whales are polygamous. Many thus believe that some males are excess, although few if any of the females are. As the sperm whale has become increasingly important to the industry in the 1970's, this social structure has become central to the future of the management regime. In 1973, of a total quota of 37,500 whales, 23,000 were sperm whales. *Id.* at 27-29.

115. *Id.*

116. *Compare* [1972-1973] TWENTY-FOURTH REP. COMM'N 29 (Int'l Comm'n on Whaling) *with* [1973-1974] TWENTY-FIFTH REP. COMM'N 27-28 (Int'l Comm'n on Whaling).

117. [1973-1974] TWENTY-FOURTH REP. COMM'N 27 (Int'l Comm'n on Whaling).

118. They objected to the regional division of the sperm whale quota, the decision to phase out fin whaling, and the retention of the previous year's minke whale quota. *Id.* at 6-8.

119. Pub. L. No. 92-219, 85 Stat. 786 (1971), *codified at* 22 U.S.C.A. § 1978 (West Supp. 1980). The Pelly amendment was passed in 1971 as a result of a dispute with Denmark over alleged overfishing of salmon. *See* H.R. REP. NO. 468, 92d Cong., 1st Sess. 2, *reprinted in* [1971] U.S. CODE CONG. & AD. NEWS 2409, 2411. Its far-reaching power has been a boon to American conservationists. Other conservation legislation included the Marine Mammal Protection Act of 1972, 16 U.S.C. §§ 1361-1407 (1976) and the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1543 (1976).

120. 22 U.S.C.A. § 1978 (West Supp. 1980).

121. The President reported to Congress that he believed that Japan and the Soviet Union would abide by the quotas in the future. Message to Congress Reporting on International Whaling Operations and Conservation Programs, [1975] PUB. PAPERS 47. As no further objections have occurred, it is possible that the threat of the Pelly amendment was useful in arriving at the complicated changes in IWC procedure that took place in 1974 and 1975. *See* text accompanying notes 124-30 *infra*.

American boycott of Japanese and Soviet goods¹²² which lingers today. Demands for the moratorium became insistent. New and potentially powerful voices had entered the debate and had to be considered. The politics of whaling were changing.¹²³

At the 1974 meeting, the moratorium proposal was introduced for a third time. This year, however, an Australian compromise proposal requiring only "selective" moratoria was adopted by the Commission.¹²⁴ The Australian resolution required that management of whales be based on the concepts of maximum sustainable yield (MSY) as well as "such considerations as total weight of whales and interactions between species in the marine ecosystem."¹²⁵ Under the resolution, which would become effective in 1975, each species would be classified into one of three categories according to the advice of the Scientific Committee.¹²⁶ Populations above the MSY level were labeled "Initial Management Stocks" and could be reduced to MSY. Those "at or near" MSY levels were labeled "Sustained Management Stocks" and were required to be maintained at those levels. Those below the MSY level were labeled "Protection Stocks" and were to be protected from any depletion until they reached a Sustained Management level. The acceptance of this resolution seemed to promise that control of whaling activities finally was to be on a "scientific" basis. Even apart from the uncertainties of the classification system itself,¹²⁷ however, the concept of maximum sustainable yield was highly questionable.¹²⁸ Even more problematic was the dependence of this New Management Procedure (NMP) on accurate scientific advice. Not only would it be necessary to have sufficient scientific data, but the manipulation and use of this data also would be critical. These controversial issues turned the Scientific Committee into a new forum for political debate. The now-famous re-

122. See text accompanying notes 358-61 *infra*. For an account of events surrounding the boycott, a strategy that has provoked much dissension within the conservation movement, see Hill, *Vanishing Giants: History, Biology and Fate of the Great Whales*, AUDUBON, Jan. 1975, at 56.

123. The recent politics of whale conservation will be discussed in greater detail when this Perspective considers the meetings of the IWC since 1977. See text accompanying notes 140-294 *infra*.

124. [1974-1975] TWENTY-SIXTH REP. COMM'N 25-26 (Int'l Whaling Comm'n).

125. *Id.* at 25.

126. *Id.* at 26.

127. Two immediate sources of concern were the rate of reduction of the Initial Management Stocks to the Sustained Management Stocks level and the definition of "at or near" MSY.

128. MSY operates on the principle that a reduction in the total population of a species provides an "excess" in the ecosystem and thus results in an increase in the birth rate making more animals available on a continuing basis. This ignores the role of other animals which may move in to fill the gap. Hence, there is a need for an approach which considers the total ecosystem. Unlike MSY, such an approach would explain why depleted whale populations have not recovered. See Larkin, *An Epitaph for the Concept of Maximum Sustained Yield*, 106 AM. FISHERIES SOCIETIES TRANSACTIONS 1-11 (1977).

mark of the Mexican delegate at the end of the meeting made clear that faith in the compromise scheme was not universal:

This Commission will be known to history as a small body of men who failed to act responsibly in the terms of a very large commitment to the world and who protected the interests of a few whalers and not the future of thousands of whales.¹²⁹

The New Management Procedure was implemented in 1975 when quotas were set for all whales in a number of regions in the Southern Hemisphere. Quotas for the North Atlantic were established for the first time, and there they were also divided into areas. Aggregate quotas were set for each species in the North Pacific. Quotas were reduced for nearly all areas and species.¹³⁰ These quotas have continued to be reduced on an annual basis in accordance with the recommendations of the Scientific Committee.

129. *Quoted in* WHALE MANUAL '78, *supra* note 27, at frontispiece.

130. [1975-1976] TWENTY-SEVENTH REP. COMM'N 17, 24 (Int'l Whaling Comm'n).

TABLE 2: IWC QUOTAS AND CATCHES¹³¹

Southern Hemisphere	1975-1976		1976-1977		1977-1978		1978-1979		1979-1980	
	quota	catch	quota	catch	quota	catch	quota	catch	quota	catch
Fin	220	206	0	0	0	0	0	0	0	0
Sei	2,230 (6 areas)	1,820	1,863 (6 areas)	1,861	771	565	0	0	0	0
Brydes	0		0	225**	0	5**			264	
Minke	6,810 (6 areas)	6,034	8,900 (6 areas)	8,676	5,690	5,000	6,221		8,102	
Sperm male	5,870 (6 areas)	4,022	3,984 (9 areas)	3,308	4,538	3,476	4,875		580	
female	4,870	3,024	897 (9 areas)	767	1,370	1,061				
North Pacific										
Fin	0	162	0	0	0	0				
Sei	0	508	0	0	0	0				
Brydes	1,363	1,340	1,000	1,340	524	479	454		479	
Minke		370	541 (3 areas)	360	400	1,361	400		1,361	
Gray							178		179	
Sperm male	5,200	4,200	4,320	3,628	5,105	3,800	3,800		1,350	
female	3,100	3,011	2,880	2,716	1,339	11%	11%			

North Atlantic									
Fin	363 (4 areas)	246	344 (5 areas)	275	459	470	624		
Sei			132	3	84	84	100		
Bryedes				0	0				
Minke	2,550 (2 areas)	2,140	2,483 (4 areas)	2,343	2,555	2,552	2,543		
Sperm	363	37	344 *	111	685	685	273		
Total	32,939	27,161	27,939	25,613	23,520	19,724	15,891*		

* Danish humpback (10) and American bowhead (26) included.

** Taken under special scientific permit.

131. WHALE MANUAL '78, *supra* note 27, at 38; [1978-1979] THIRTIETH REP. COMM'N (Int'l Whaling Comm'n); [1979-1980] THIRTY-FIRST REP. COMM'N (Int'l Whaling Comm'n).

By 1976, all Antarctic fin whales were finally protected,¹³² and quotas had been established for all other whales exploited by IWC members. In that year, the total allowable catch was only seventy-two percent of that permitted four years earlier when the moratorium proposal was first introduced at the Commission. Japan had reduced the number of fleets it would send to the Southern Hemisphere from four fleets in 1974 to two in 1976. The U.S.S.R. also had only two fleets. In light of this trend, a Soviet admiral visiting Vancouver that summer predicted that the U.S.S.R. would soon withdraw from whaling.¹³³ This prediction was denied by authorities in Moscow, but environmentalists were now confidently predicting the end of the whaling industry within a "year or two."¹³⁴

The whalers, however, were reluctant to quit. Japan's whaling industry had made large profits over the years from exploitation of whales, largely because it had not been forced to pay the high costs of long-term maintenance. In a 1976 move to maintain profitability, Japan's six major fishing companies merged their separate whaling divisions into one firm, the Japan Joint Whaling Company.¹³⁵ Japan and the Soviet Union, the two distant water pelagic nations, accounted for eighty-five percent of the world's whaling. Although they were streamlining their fleets in response to lower catches and quotas, there were no obvious plans to retire them.

In addition, whaling occurring outside the auspices of the Whaling Commission showed no sign of abating, despite requests that non-IWC whaling nations join the Commission and subject their catches to scientific scrutiny and control. Many of the products of this whaling activity were finding their way into Japan.¹³⁶ It became evident that controlling such whaling would be a long-term project. Nevertheless, it was not until 1976 that the IWC finally set up permanent offices in Cambridge, England and appointed a Secretary to administer them. At the same time, discussion began on redrafting the 1946 Whaling Conven-

132. [1976-1977] TWENTY-EIGHTH REP. COMM'N 23-24 (Int'l Whaling Comm'n). At that time, the populations of great whales remaining in the Antarctic were estimated to be as follows (in thousands with the original population and the percentage of that total remaining in brackets): fin, 84 [400, 24%], blue 10 [200, 5%], humpback 3 [100, 3%], sei 40 [75, 53%], minke 200 [200, 100%]. *SCAR/SCOR Group on the Living Resources of the Southern Ocean*, SCAR Bulletin, No. 55, at 175 (Jan. 1977).

133. *Goodwill Mission of Soviets Marred by Demonstrators*, Vancouver Sun, Aug. 30, 1976 at 17, cols. 1, 2.

134. Interview with Craig Van Note, Executive Director of the Monitor Consortium, in Washington, D.C. (May 1977).

135. The reason given in Japan for the joint venture was not that whales were depleted, but that "Japan's whaling quota has been reduced . . . as a result of mounting international campaigns for protection of animals and preservation of resources." *Joint Whaling Firm Set for Small Quota*, Japan Stock J., Feb. 23, 1976, at 2, col. 4.

136. The control of "pirate" whaling—that by states not members of the IWC—is discussed at text accompanying notes 159-64, 189-90, 223-24, 255-56, 272-73 *infra*.

tion to reflect new priorities and procedures. Many new developments—such as the United Nations Conference on the Law of the Sea, the increasing exploitation of other Antarctic resources, and the concern with protecting other cetaceans—notably dolphins and porpoises—dictated a continuing concern for the management of these creatures.

Throughout the 1960's the vast majority of IWC members were whaling nations. Until the mid-1960's, the United Kingdom and the Netherlands sent pelagic fleets to the Antarctic. Australia, Canada, New Zealand, and the United States all carried on coastal whaling. By the mid-1970's, this situation had changed dramatically. At the 1977 meeting in Canberra, Australia,¹³⁷ the Commission issued a table of catches for the previous 1976-77 season.¹³⁸ The seventeen members of the IWC at that time can be classified as follows on the basis of these 1977 figures.

TABLE 3: 1976-77 CATCHES¹³⁹

Country	Number of Whales Killed	Comments
<u>Pelagic Whaling Countries</u>		
U.S.S.R.	12,762	Largely sperm whales; pelagic expeditions going to both the Antarctic and North Pacific.
Japan	10,207	Largely sperm and minke whales; pelagic expeditions to Antarctic and North Pacific.
Norway	2,146	Minke whales. Stopped Antarctic whaling in 1968. Combined catcher/factory ships in North Atlantic.
<u>Coastal Whaling Countries</u>		
Iceland	586	275 fin whales (the only member nation taking these in large numbers), minke, and sperm whales.
Australia	995	Sperm whales.
Brazil	788	Minke whales.
Denmark	185	Largely minke whales.
<u>Non-Whaling Countries</u>		
Argentina	0	
Canada	0	Aboriginal whaling; receives an unused quota for 90 fin whales off Newfoundland.
France	0	
Mexico	0	
Netherlands	0	
New Zealand	0	
Panama	0	

137. The author has attended all sessions of the IWC since 1977 as the representative of and legal policy advisor to Greenpeace. Much of the information that follows is based on this experience as a participant and an observer.

138. International Whaling Commission, Whaling Quotas, June 24, 1977 (Press release).

139. *Id.*

Country	Number of Whales Killed	Comments
South Africa	0	Retired from whaling in 1976.
United Kingdom	0	
United States	0	Aboriginal Whaling.

In addition to these voting members of the Commission, five non-member nations attended the 1977 meeting as observers, as did two intergovernmental organizations (IGO's), including the FAO,¹⁴⁰ and eight environmental nongovernmental organizations (NGO's).¹⁴¹ The meeting was held amidst massive publicity—largely as a result of a national campaign against Australian whaling organized by one NGO, Project Jonah. More environmental organizations attended this meeting than ever before.¹⁴² Together they put out a newspaper, *ECO*, which reported on the events of the meeting that was otherwise closed to the press. Founded at the United Nations Stockholm Conference in 1972, *ECO* has been a frequent observer of international environmental meetings. This meeting marked its first attendance at the IWC, but it soon became a familiar participant.¹⁴³

It became evident with the opening addresses that the moratorium, while no longer an immediate issue, would haunt the meeting were the Commission not to perform effectively. The ambivalence on the moratorium issue was evident in a message from President Carter read by the U.S. Commissioner:

Just one month ago, in my Environmental Message to the Congress of the United States, I reaffirmed the continued support of the United States Government for the ten-year worldwide moratorium on commercial whaling and prohibition of commercial whaling within our two-hundred mile fishing zone.

At the same time, I expressed to the Congress our firm backing for the work of the IWC. . . .

. . . .

140. The United Nations Environment Programme (UNEP) usually sent an observer as well, but did not do so that year. Another important IGO was the International Union for the Conservation of Nature (IUCN). In fact, the IUCN and FAO representatives have been the backbone of the conservationist position in the Scientific Committee in recent years.

141. Active NGO's at the meeting included, *inter alia*, the Friends of the Earth (FOE), Greenpeace, Project Jonah, the Sierra Club, and the World Wildlife Fund.

142. See table 7 at text accompanying note 355 *infra*.

143. *ECO* describes itself as having published "at a number of nuclear energy meetings" as well as at some other United Nations conferences. *ECO*, June 20, 1977, at 1, col. 3. Describing the end of the Canberra meeting, *ECO* concluded that "observers at the 1977 IWC had a major impact on events." *ECO*, June 27, 1977, at 3, col. 1. "The publication of *ECO*, the continual lobbying, and the exercise of some imagination undoubtedly strengthened the hand of conservationists within the IWC. It was the first time that the IWC process had been publicly discussed as it occurred." *Id.*

The United States hopes . . . that we may create a truly effective and representative international system to safeguard whales for the future.¹⁴⁴

The focus of the meeting was the ability of the IWC to create a "truly effective and representative" system. Throughout the preceding weeks, the Scientific Committee had been meeting to recommend quotas, yet its very methods were elsewhere being questioned. At a meeting in Bergen, Norway the previous autumn, a working group of a joint FAO/United Nations Environment Programme (UNEP) Scientific Consultation on Marine Mammals had criticized MSY as a management goal. According to the FAO report of the meeting, MSY "is difficult and risky to use as a management goal because the level fluctuates due to environmental variations, both physical and biological, and it ignores the complex social costs and benefits of harvesting."¹⁴⁵

These general criticisms of MSY were underscored for the particular species under consideration in Canberra, the sperm whale, because of its unique biological and social nature, and the minke whale, because the ecosystem in which it was living had been turned upside-down by the depletion of competitor whale species. Not only was the MSY model itself of limited value in setting scientific quotas, but there also were serious gaps in the information on which the MSY levels were based. With the U.S.S.R. providing almost no data, and Japan only a moderate amount, the Scientific and Technical Committees implored the Commission for more and timely information.¹⁴⁶ As one of the world's leading whale scientists, Dr. Sidney Holt of the FAO, noted at the meeting:

To a considerable degree the scientists are not seekers of knowledge but are detectives. . . . In practice the Committee learns about such things, if it *does* learn about them, some years after they have happened. They are lucky if they can measure the effect and take account of it several years later.¹⁴⁷

144. Statement by President Carter read by United States Commissioner William Aron, June 20, 1977, *quoted in* ECO, June 20, 1977, at 3, col. 3. In the statement, the President also requested to be informed of actions by members that "diminish the effectiveness" of the Commission's conservation measures. This was a clear reference to the possibility of invoking the Pelly amendment which would allow the Executive to stop all fisheries imports into the United States from any delinquent states. See notes 119-21 *supra* and accompanying text.

145. See FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS, 1 MAMMALS IN THE SEAS 163-164 (1978).

146. See *Report of the Technical Committee*, Doc. IWC/29/5 at 14; [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 14 (Int'l Whaling Comm'n). A new paragraph was added to the Schedule requesting the collection of additional information "where possible." *Id.* at 38. There are no penalties for failure to provide this information.

147. *Are Scientists Ever Biased?* ECO, June 24, 1977, at 8, cols. 1, 2 (emphasis in original). Dr. Holt has written widely and critically of whale management. He was a member of the Committee of Three and has also been head of the FAO's Marine Mammal Project.

A shaky model and sparse data combined to produce widely differing interpretations and analyses. Quota setting under the New Management Procedure (NMP) requires that whale population levels be held to a certain percentage of their original levels.¹⁴⁸ Having estimated this original population at some (often questionable) level, the Scientific Committee would determine the current population not by a nose count of the whales, but by the amount of effort it took to kill a certain number of them. As the numbers of whales decreased, the "catch per unit effort" would also go down. The complexity of the calculations can be appreciated when one considers that one key variable, effort, is continually changing with the modification and improvement of the catching vessels. Thus, the relation between population and "effort" is not straightforward. In Canberra, the incorporation into the calculations of the impact of a sonar technique known as ASDIC threw the calculations on sperm whaling into disarray. Data varied, analyses conflicted, and results were widely divergent.¹⁴⁹

The outcome of this confusion was an unexpectedly large reduction in the quotas by the Commission. In the Southern Hemisphere, minke whale quotas were reduced by thirty-six percent and sei whale limits by fifty-eight percent,¹⁵⁰ although sperm whale quotas in those areas were increased. While most other quotas remained fairly stable in the North Pacific, the sperm whale quota there was slashed from 7,200 to 763.¹⁵¹ The reason for the reduction was the estimated shift in the population level from "sustained management" to a "protection stock" as a result of the change in the "effort modifiers" used for calculating "catch per unit effort" and, hence, populations.¹⁵² The conserva-

148. See *Report of Special Meeting of the Scientific Committee*, REPORT AND PAPERS OF THE SCIENTIFIC COMMITTEE OF THE COMMISSION 60, 89 (1975).

149. See *Report of the Scientific Committee*, [1977-1978] TWENTY-NINTH REP. COMM'N 61 (Int'l Whaling Comm'n). To the extent that ASDIC increases efficiency in catching, the effort is increased, the catch per unit effort is decreased, and the population is considered to be lower. In this case, one study of South African whaling showed ASDIC giving an increase in efficiency of some 130% as opposed to the 38% agreed upon for the IWC model based on Japanese data. *Numbers Problems*, ECO, June 22, 1977, at 1, col. 4. The hazards inherent in this system of quota setting are only too obvious, and, given the range of estimates, the consequences are enormous. One example of this uncertainty in the estimation of population widely discussed in Canberra was the wide range in estimated sustainable yield for sei whales. [1977-1978] TWENTY-NINTH REP. COMM'N 23, 44, 55 (Int'l Whaling Comm'n).

150. See [1977-1978] CHAIRMAN'S REP. TWENTY-NINTH MEETING 5, 6 (Int'l Whaling Comm'n). This meant that the sei whale was now protected in four of six areas of the Southern Hemisphere. *Id.* at 6. A special scientific meeting was planned to consider the impact on the minke whale of the recent changes in its ecosystem. *Id.* at 5.

151. *Id.* at 7-8.

152. Whaling nations alleged that the shift was actually caused by a small change in variables, and that this was more a reflection on the operation of the New Management Procedure than on the state of the sperm whale population. *Report of the Scientific Committee*, [1977-1978] TWENTY-NINTH REP. COMM'N 61 (Int'l Whaling Comm'n). There is no

tionists were jubilant, while Japan and the Soviet Union foresaw the potential closure of one-half of their pelagic operations as the result of a "mere technicality." The Russians charged that one "cannot trust such recommendations," and the Japanese were angered by the "lack of sympathy and understanding" shown for their industry and concerned that the "Japanese scientific view should not always be disregarded."¹⁵³ In the past, the myriad inadequacies and uncertainties in the model and the data had worked to the industry's advantage. This time, however, the model worked against them. Conservation was triumphant over consumption.

Or so it seemed. Japan demanded a chance to consider the data further; thus the sperm whale quota was set as an interim quota to be reconsidered at a special meeting of the Scientific Committee in November. The U.S. Commissioner, however, expected that "unless substantial new data is made available, the new meeting of the Scientific Committee would produce little different results from the recommendations of today."¹⁵⁴

The IWC made one other decision on quota levels that was to have significant repercussions. Since the 1930's, the bowhead whales of the Arctic had been protected from commercial whaling, having been heavily exploited by such whaling in the nineteenth century. This species was the most highly endangered of all whale populations, existing at a small fraction (perhaps two to three percent¹⁵⁵) of its original population. Nevertheless, an exception had been granted on harvesting these whales that allowed the Alaskan Inupiat Eskimos to take an estimated ten whales each year.¹⁵⁶ In recent years, however, the kill had escalated, reaching a total of forty-eight in the 1976 spring hunt and twenty-six in 1977, with another seventy-seven "struck but lost."¹⁵⁷ This total far exceeded that which would have been allowed even with a healthy sustained management stock. In Canberra, the exception was revoked and a zero quota set.¹⁵⁸ The United States, with the Inupiat on

guarantee, however, that the change in the variables (based on limited industry data) should not have been much greater.

153. Author's Transcript of Plenary Meeting (June 24, 1977).

154. *Id.*

155. This two to three percent figure was generally agreed upon by the Scientific Committee to represent the population left for the species as a whole. See *Report of the Scientific Committee*, [1977-1978] TWENTY-NINTH REP. COMM'N 67 (Int'l Whaling Comm'n).

156. The annual Alaskan bowhead harvest averaged an estimated ten from 1946 to 1970. NATIONAL MARINE FISHERIES SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEP'T OF COMMERCE, 1 FINAL ENVIRONMENTAL IMPACT STATEMENT, INT'L WHALING COMM'N DELETION OF NATIVE EXEMPTION FOR THE SUBSISTENCE HARVEST OF BOWHEAD WHALES 37 (1977).

157. [1977-1978] TWENTY-NINTH REP. COMM'N 67 (Int'l Whaling Comm'n).

158. [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 11-12 (Int'l Whaling Comm'n) (amending Schedule para. 7). The Marine Mammal Protection Act of 1972, 16 U.S.C. §§ 1361-1407 (1976), provides that it shall not contravene existing treaty obligations. *Id.*

one side and the whale conservationists on the other, found itself in a difficult political situation.

Another important issue before the Commission in 1977 was the increase in whaling by nonmembers. This problem was serious, and, with the tightening of the Commission's quotas, one that was getting worse. Spain and Portugal had long killed whales off their coasts including some—fin and humpback—that were otherwise protected. Chile and Peru (particularly the latter) had taken sizable catches of whales and had even maintained their own "regulatory" commission, the South Pacific Commission.¹⁵⁹ South Korea hunted minke whales in the Sea of Japan, and Taiwan exported a sizable quantity of whale products directly to Japan. Most notorious of all was the Japanese-supported pirate whaling vessel, the *Sierra*. This ship roamed the coasts of Africa taking any and all whales it could get, regardless of the whales' status under the IWC.¹⁶⁰

This widespread avoidance of Commission regulation posed a serious threat to the efficacy of its conservation measures. Yet most of the noncomplying operations were owned, operated, and manned by the corporations of Japan, an IWC member, and the products of such operations were exported to Japan.¹⁶¹ This ownership was an obvious violation of the spirit of the IWC convention, yet it was tolerated for years without comment. Craig Van Note, director of the Washington-based Monitor Consortium, a coalition of environmental organizations set up to monitor U.S. compliance with its conservation legislation, explained one particularly flagrant action:

In 1964, Japan finally agreed to stop the killing of blue whales. . . .

. . . [A]t the same time that Japan was piously pronouncing that it was giving full protection to the blue whale, the Japanese government licensed its whalers to set up shore stations in Chile to go after the blues.

§ 1383. Since the IWC Schedule is explicitly incorporated by reference into the IWC Convention, 1946 Whaling Convention, *supra* note 47, art. I, para. 1, the Schedule is binding on the United States.

Serious conflicting values are at stake in the bowhead issue: the survival of the most highly endangered of all whale populations, and the subsistence and cultural needs of the Eskimos. The increased kill in the 1970's is, however, due significantly to the increased Eskimo wealth resulting from the Alaskan land claims settlement. There are fierce disagreements over the extent of the subsistence or cultural needs inherent in the hunt and especially in the level of the hunt. For a recent article on this issue, see Rosenblatt, *The Federal Trust Responsibility and Eskimo Whaling*, 7 B.C. ENV'TL AFF. L. REV. 505 (1979).

159. On the Commission, see P. Bock, *supra* note 40, at 174-77.

160. See C. VAN NOTE, PIRATE WHALERS 9-19 (1979).

161. In 1976 Japanese imports of whale meat from nonmembers included the following: North Korea, 38 tons; Chile, 88 tons; Republic of Korea, 1,195 tons; Spain, 1,374 tons; Somalia (then the place of registry of the notorious *Sierra*) 1,478 tons; and Peru, 1,492 tons. Japan Marine Importers Association, Imports of Marine Products by Country (Dec. 1976). In 1976, these countries accounted for approximately 2,500 whales killed.

For four years between 1964 and 1968, the Japanese killed 690 blue whales. [They also killed 1600 fin and sei whales, 1500 sperm whales and] shut down in 1968 when the profitable blue and fin whales were wiped out.¹⁶²

For many years the Commission took no action to control such activity. In Canberra, it was reported that the Chairman had requested that the nonmember whaling nations join the IWC, and the Commission addressed resolutions to China, North and South Korea, Spain, and Portugal, requesting their cooperation in limiting their catches and in providing data to the IWC.¹⁶³ The United States proposed that the convention's Schedule be amended to prohibit both the importation by a Commission member of whale products from a nonmember and the sale of whaling equipment by members to nonmembers. Japan quickly pointed out that this proposal was contrary to the powers granted under article V of the convention, and others agreed. As a result, two other resolutions were passed, exhorting members to curtail their importation of whale products from nonmembers and their exportation of whaling expertise to nonmembers. Not only were these resolutions nonbinding, but the wording proposed by the United States was watered down by an amendment from the United Kingdom.¹⁶⁴ The resolutions were to have no practical effect.

In addition to circumventing the convention by operating outside of it, Japan further skirted the quota controls through the legal loophole offered by the power to grant "scientific permits" without Commission approval.¹⁶⁵ In 1976, Japan had issued itself a permit to kill 240 Bryde's whales,¹⁶⁶ even though the IWC had placed a zero quota on this population.¹⁶⁷ Thereafter, the Commission members agreed to submit such permits to the Scientific Committee for its opinion before issuing them.¹⁶⁸

The Commission also discussed the killing of small cetaceans and passed a resolution urging that states report on their activities in this area.¹⁶⁹ These cetaceans are not presently regulated by the IWC, and

162. Van Note, *The Pirate Whalers*, GREENPEACE CHRONICLES, Dec. 1978, at 5, col. 2.

163. See [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 15, apps. 2, 3, 4, 5. (Int'l Whaling Comm'n).

164. *Id.* apps. 7, 8. The United States proposed that members "shall" take all "necessary" measures to "prevent" the transfer of whaling equipment to nonmembers. The British Commissioner, Mr. Kelsey, proposed some "minor" changes: members "should" take all "practicable" measures to "discourage" such transfers. *Just Semantics?*, ECO, June 27, 1977 at 2, col. 4.

165. 1946 Whaling Convention, *supra* note 47, art. VIII.

166. *Report of the Scientific Committee*, Doc. IWC/29/4, at A2.

167. [1976] CHAIRMAN'S REP. TWENTY-EIGHTH MEETING 24 (Int'l Whaling Comm'n).

168. This was accomplished by a change in Rule XVII of the Rules of Procedure. [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 13, 36 (Int'l Whaling Comm'n).

169. *Id.* at 12, 32. This catch of small cetaceans is a serious problem; some countries specifically kill small cetaceans. See *Hundreds of Dolphins Killed by Japanese Fishermen*,

by discussing them the Commission was moving towards an expansion of its jurisdiction. The Commissioners also agreed to convene a meeting in Denmark in 1978 to consider a badly needed rewriting of the convention.¹⁷⁰ Finally, the IWC agreed to establish closer links with the secretariat of the Convention on International Trade in Endangered Species (CITES) created in 1973 to control trade in depleted and threatened species.¹⁷¹

On the major issues, the Canberra meeting was but a prelude of the conflict to follow. Within a few weeks of the conclusion of the meeting, attention shifted to Washington, where an Alaskan Inupiat lobby demanded that the United States immediately file an objection to the zero bowhead quota. Conservationists were alarmed at such a prospect, believing that it would destroy almost a decade's work in tightening the Commission's regulations and procedures. The economic boycott of Japan would appear hypocritical and meaningless, United States credibility would be tarnished, and objection would again become a tool by which commercial whalers could avoid IWC quotas. The controversy spawned numerous newspaper advertisements and editorials.¹⁷² Bureaucratic and political lobbying was intense, as were interagency differences.¹⁷³ Because of the divisions within the State Department, the outcome could not be predicted. On October 20, four days before the end of the ninety-day objection period, the decision was made: the United States would not file an objection.¹⁷⁴ Con-

N.Y. Times, Mar. 8, 1980, at 4, col. 1. In other countries, small cetaceans are often killed as an incident to other fisheries—such as in the purse-seiners' catch of tuna. This latter matter has been much in issue in the United States as the American tuna fisheries have had a bad record of incidental porpoise kills. See generally, Scarff, *supra* note 7, at 378-80.

170. [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 12, 14 (Int'l Whaling Comm'n).

171. *Id.* at 15-16. CITES was a product of a decade's work by the International Union for the Conservation of Nature (IUCN). CITES maintains its own nonpolitical secretariat to update and monitor compliance with its trade restrictions. All cetacean populations have recently been listed on the convention's appendices. A more detailed discussion of IUCN and CITES follows at text accompanying notes 349-354 *infra*. As of December 1979, fifteen members of the IWC were parties to CITES.

172. See *Tale of the Bowhead*, N.Y. Times, Oct. 1, 1977, at 18, col. 1; *Protecting the Bowhead*, Wash. Post, Oct. 1, 1977, at A16, col. 1. See also Lopez, *An Alaskan Tragedy*, HARPER'S MAGAZINE, Sept. 1977, at 30; Payne, *United States v. the Bowhead Whale: A Case of Domestic Politics*, Los Angeles Times, Oct. 2, 1977, § VI, at 2, col. 1. For two large newspaper advertisements, see *The Bowhead Controversy: Leadership or Hypocrisy?* Wash. Post, Sept. 28, 1977, at A9, cols. 1-5; *Dear President Carter*, Wash. Post, Oct. 12, 1977, at A7, cols. 1-5.

173. The interagency dispute was basically between the Department of Commerce and its National Oceanic and Atmospheric Administration (NOAA), which is responsible for IWC policy, and the Department of the Interior, which is responsible for Indian affairs. The Department of State had the final say, and on its staff was a strong ally of the indigenous American cause, Assistant Secretary of State Patsy Mink.

174. 77 DEP'T STATE BULL. 740 (1977).

servationists claimed a victory for their efforts.¹⁷⁵

But the drama was not over. The next day, the Alaska Eskimo Whaling Commission filed suit in the United States District Court requesting a temporary restraining order to require the Government to file an objection. The court granted the request, reasoning that there was too little opportunity for the Eskimos to present their claims fully before the end of the objection period.¹⁷⁶ By granting a temporary restraining order, the claims could be heard and, if warranted, the objection rescinded later without substantial harm to the Government. The Government immediately appealed, claiming that the very filing of an objection was substantial harm. The Court of Appeals for the District of Columbia Circuit agreed, and on October 24 it vacated the lower court order.¹⁷⁷ An application to the U.S. Supreme Court for a stay of the order was denied.¹⁷⁸

As an alternative to filing an objection, the United States immediately began preparing to pursue the matter at the IWC. The bowhead issue was added to the agenda of the special meeting of the Commission on the sperm whale quota, and the Administrator of the Department of Commerce's National Oceanic and Atmospheric Administration, Mr. Richard Frank, assumed the difficult position of U.S. Commissioner to the IWC. Meanwhile, former Commissioner William Aron undertook an extensive diplomatic tour of IWC-member nations to seek support for the American proposals.¹⁷⁹

When the Scientific Committee reconvened in November, it was evident that a special meeting of the Commission would be held in Tokyo in December. The bowhead controversy alone had guaranteed this, but major differences also remained over the status of the sperm whale in the North Pacific. Because of the application in Canberra of the Antarctic "effort modifier" value of 1.38 for ASDIC¹⁸⁰ (an increased catcher efficiency of thirty-eight percent), the estimated population of male sperm whales in the North Pacific area had been revised

175. As the sponsor of the Washington Post advertisement, the Washington-based Whale Protection Fund later informed its members: "This decision was due, in part, to the WPF supporters who voiced their concern and contributed to the government's decision-making process." *WHALE REP.*, Fall 1977, at 3 (Center For Environmental Education publication). In the short bureaucratic struggle, almost 30,000 letters were received by the Departments of Commerce and State. *Id.* at 2.

176. *Adams v. Vance*, No. 77-1834 (D.D.C. Oct. 21, 1977), *vacated* 570 F.2d 950 (D.C. Cir. 1977), *stay denied*, No. 77-367 (Burger, Circuit Justice, Oct. 24, 1977).

177. *Id.* See Mason, *The Bowhead Whale Controversy: Background and Aftermath of Adams v. Vance*, 2 HARV. ENV'T'L L. REV. 363 (1977); Rosenblatt, *supra* note 158 at 518-522.

178. Application for stay denied by Burger, Circuit Justice (1977).

179. Mr. Aron visited Canada, Norway, Denmark, Iceland, Britain, and France. Such premeeting tours have been conducted since 1974. Interview with Prudence Fox, National Marine Fisheries Service (April 16, 1979).

180. *Report of the Scientific Committee*, [1977] SPECIAL MEETING COMM'N 4 (Int'l Whaling Comm'n).

downward into protection status.¹⁸¹ At the special Scientific Committee meeting, the Japanese scientists offered analyses of ASDIC efficiency for their vessels in the North Pacific which indicated only a five percent increase in efficiency. Despite the obvious discrepancy, the Scientific Committee lacked any hard data¹⁸² and decided simply to pool the two sets of figures. From these figures of 1.38 and 1.05, the "scientific" decision was to set a correction factor of 1.16. The industry goal had been achieved; the change was enough to revise the population estimates upward and into a higher management category. The committee then recommended that the quota be raised from 763 to 6,444,¹⁸³ only 800 whales fewer than the previous year's quota. Pelagic whaling in the North Pacific could continue.

The special meeting of the Commission was set for Tokyo in mid-December. In contrast to the rancorous debates in Canberra and despite the questionable nature of the new data and recommendations, the reaction in Tokyo was subdued. The proposed new sperm whale quota caused scarcely a ripple, and it was accepted with almost no debate forty-two minutes after it was introduced. Only two countries failed to support it: France voted against and the United Kingdom abstained.¹⁸⁴

Two factors combined to create this easy reversal. First, with the recent acceptance of the New Management Procedure in 1974, the national policy of most countries was to accept the recommendations of the Scientific Committee without challenge. This policy did not remove all bargaining, however, since the whaling nations freely challenged the committee's conclusions. Nevertheless, except when firm alternatives were presented in a minority scientific report, nonwhaling nations usually accepted the Scientific Committee's report on principle. The absence of a minority alternative in this Scientific Committee report was unfortunate, especially because there was serious dissent. The scientific representative of the International Union for the Conservation of Nature (IUCN) at the Scientific Committee, Dr. John Beddington, submitted a separate statement to the Commission:

IUCN is unhappy both about the conclusions reached by the Scientific Committee . . . and by the way they were reached. It is not confident that an adequate assessment of the status of the stocks was

181. [1977] CHAIRMAN'S REP. SPECIAL MEETING 7-8 (Int'l Whaling Comm'n).

182. The new Japanese data was based on a comparison of boats with ASDIC and boats without (even though they worked together), rather than on the same boat before and after the introduction of ASDIC. Some boats even had a negative correlation (less efficiency with ASDIC). Considering the high cost of this device, its use is hard to understand for such meager results. For details on this issue, see *Report of the Scientific Committee*, Doc. IWC/SPEC 77/4, at 4-6.

183. *Id.* at 25.

184. Author's Transcript of Plenary Meeting (Dec. 6, 1977).

made nor that the mathematical model used is valid. . . . Accordingly it reserves its right to continue to work for alternative assessment and management procedures to those used by the IWC.¹⁸⁵

The strongest criticism came from another nonstate representative, Dr. Sidney Holt of the FAO. Dr. Holt had not attended the Scientific Committee's deliberations, and he dismissed their results as "not credible":

In sum, to an "observer" it does not appear that the advice now presented is more reliable or more likely to be correct than the previous advice offered. The complex calculations that have been made are on the one hand incomplete in that the properties of the model and their dependence on precise parameter estimates and assumptions have not been revealed and, on the other hand, are such that they obscure the facts that the crucial parameters have been guessed and not estimated, and that the calibration of crude effort data to take into account increasing efficiency is still very far from satisfactory.¹⁸⁶

The political neutralization of the Commission's main conservationist, the United States, also contributed to the ease with which the quota was raised. With the bowhead issue on the agenda, the United States delegation had to curry favor with the whaling nations which, as a group, could block its proposal in plenary. As a result, American scientists were occupied almost exclusively with the bowhead issue in the Scientific Committee, and the U.S. Commissioner was silent in plenary on the sperm whale quota.

The American delegation was in shambles. Its usual bevy of environmental representatives was supplemented by fifteen Eskimo representatives, and, rife with dissent, the delegation was ineffective. The United States had hoped to have the aboriginal whaling exception to the bowhead protection status reinstated, allowing the management of the Alaskan bowhead whales to be returned to domestic control. Its scientists had submitted this proposal to the Scientific Committee, but the committee's response was unequivocal:

The Committee reiterates its statement of June 1977 that taking of any bowhead whales could adversely affect the stock and contribute to preventing its eventual recovery, if in fact such recovery is still possible.

The Committee re-emphasises the serious consequences of a high rate of exploitation on a small stock which may suffer environmental perturbations.¹⁸⁷

The committee recognized that the Commission would consider other factors such as subsistence and cultural needs in reaching its

185. Statement by J. Beddington, IUCN, Doc. IWC/SPEC 77/8, at 1.

186. Statement by S. Holt, FAO, to IWC 1977 Special Meeting.

187. *Report of the Scientific Committee*, Doc. IWC/SPEC 77/4, at 28. One such environmental perturbation could easily result from drilling currently occurring in the main bowhead calving grounds in the Beaufort Sea.

quota decision, and thus put forward no quota itself. In the ensuing Commission debates, much turned on the extent of subsistence and cultural dependence and the quota that would satisfy these requirements. Eventually a decision was reached to set a quota of "12 taken or 18 struck," whichever occurred first.¹⁸⁸

A final issue was the alleged Japanese violation of the Canberra resolution urging members to "discourage" the transfer of whaling equipment to non-IWC members. It had come to light that Japan's Taiyo Fishery Company had transferred a "shrimp trawler" to Panama through a subsidiary company. Enroute to Panama the boat stopped in Tahiti and was converted to a whale catcher. It then steamed for Chile and joined the existing whaling operations of this non-IWC country.¹⁸⁹ The Commission accepted a cursory explanation from Japan of its activities:

Japan reported that it is their [sic] practice not to authorize the transfer or sale of whaling vessels and equipment to non-member whaling nations. No Japanese firms are involved in Chilean whaling operations. With respect to restrictions on imports of whale products from non-IWC nations, there are difficulties arising from other treaty obligations . . . , but steps are being taken to discourage such imports.¹⁹⁰

The Commission responded to the alleged violation by passing three more nonbinding resolutions urging all whaling nations to be cautious in their whaling.¹⁹¹ No further action was taken by the Commission, and the matter was closed.

The thirtieth annual meeting of the Commission was held in London in the last week of June 1978. The seventeen members of the Commission attended, and six nonmember countries and twenty-four NGO's and IGO's observed. The usual fare again was on the agenda, but another issue returned after a five-year absence: the moratorium. This item had been put on the agenda by Panama, whose Commissioner, Mr. J.P. Fortom-Gouin, was among the most outspoken of whale conservationists.¹⁹² Neither the Commissioner nor the moratorium issue were to remain for long. Before the meeting of the Commission began, Panama dismissed Mr. Fortom-Gouin as Commissioner, and on the first morning of the session Panama withdrew the item from

188. [1977] CHAIRMAN'S REP. SPECIAL MEETING 4 (Int'l Whaling Comm'n).

189. For details of this episode, see Van Note, *supra* note 162, at 5, 12.

190. *Id.* at 5. The full extent of the distortions in the Japanese statement was only to become apparent at the 1979 Meeting. The American silence on this issue contrasts with its attitude one year later when the bowhead issue was not on the agenda.

191. [1977] CHAIRMAN'S REP. SPECIAL MEETING, apps. 3-5, at 11-13 (Int'l Whaling Comm'n).

192. Mr. Fortom-Gouin was not a national of Panama, and his status as the Panamanian Commissioner was a comment on that country's lack of interest in the issue. Nevertheless, in both his official and private capacities, Mr. Fortom-Gouin played a central role in directing discussions in the Commission to issues of concern to critics and conservationists.

the agenda. The conservationists' newspaper, *ECO*, accused the Japanese government of applying economic pressure to Panama by threatening to cancel a ten million dollar sugar purchase.¹⁹³ The charges met denials,¹⁹⁴ but the outcome of the debate was clear: the moratorium would not be discussed.¹⁹⁵

Having quickly dispensed with the awkward revival of the moratorium, the meeting settled into the usual agenda. The major issues were, again, the sperm whale and the bowhead. Studies on the sperm whales had been undertaken since the Tokyo meeting, including an extensive investigation funded by an American environmental organization, the Whale Protection Fund.¹⁹⁶ Evidence from this and other studies that had been presented earlier at the Scientific Committee indicated an alarming trend both in the Western North Pacific and in two areas of the Southern Hemisphere. The male/female ratio was so far out of balance (there were too few males) that even if no more whales were killed it was predicted that populations would continue to decline for at least a decade.¹⁹⁷ Such a trend contravened the underlying goal of the New Management Procedure which was to "maintain" the exploited populations at a stable exploitable level.

Should the sperm whales be moved into protection status, the closure of both the Japanese and Australian coastal whaling industries would follow. On the other hand, if the whales were not protected, the

193. *ECO* reported the visit of a Japanese trade delegation to Panama headed by Mr. Kuniaka Asomura, Director of the Fisheries Division of Japan's Ministry of Foreign Affairs. *ECO*, June 26, 1978, at 1, col. 1.

194. An immediate denial at the meeting was followed by many other denials. For example, Tele-Press Associates, Inc., a New York agent of the Japan Whaling Association, formally denied the charge to the Marine Mammal Symposium in Washington on July 12, 1978. Memorandum from Alan Macnow to Participants in Marine Mammal Symposium (July 21, 1978). The Japanese embassy in Washington also issued a denial in its newsletter of July 4, 1978.

195. The Argentine Commissioner attempted to keep the issue on the agenda, but the Chairman ruled that Argentina would have to give 60 days notice for the submission to be acceptable under the Rules of Procedure. See *Answers Please*, *ECO*, June 28, 1978, at 4, col. 3. This is a dubious interpretation of Rule G, which states that "no order of business" involving a Schedule change "shall be the subject of decisive action . . . unless the subject matter has been included in the provisional order of business . . . at least 60 days in advance of the meeting." INTERNATIONAL WHALING COMMISSION, RULES OF PROCEDURE AND FINANCIAL REGULATIONS 6 (1979). Since this provision was fulfilled, the issue should have been discussed. No state, however, called for a vote on this procedural decision; therefore, the decision stood. Had the issue been discussed, it would likely have been shunted off for legal advice. As the proposal was worded, it required separate moratoria for coastal and pelagic whaling—a possible over-reaching of article V, paragraphs 2(b) and (c).

196. *WPF-Funded Scientists Prepare for IWC Meeting*, WHALE REP., Spring 1979, at 6 (Center for Environmental Education publication). The Fund contributed \$25,000 to finance a reanalysis of the sperm whale-computed model by Dr. Sidney Holt (York University, England), Dr. John Beddington (FAO), Dr. Robert May (Princeton University), and others.

197. *Report of the Scientific Committee*, Doc. IWC/30/4, Agenda Item 10.3 (1978).

credibility of the New Management Procedure (NMP) itself would be undermined. The NMP was leading the Commission to a de facto moratorium as populations dropped to protection status level. This result could be avoided only by challenging or ignoring the data, or by manipulating the terms of the NMP.¹⁹⁸

Yet in the Scientific Committee, the advisors from the FAO and IUCN again were almost alone in challenging the analyses of the numerous scientists from Japan and Australia. As *ECO* protested, "the performance of the U.S. scientists was especially dismal. . . . Time and time again, they sat silent when they should have been questioning. When they did speak it was on behalf of the industry, not the whales."¹⁹⁹

The recommendations emanating from the committee, therefore, were of little help. The committee proposed quota levels under the NMP formula that were based only on current populations and did not consider the longer trend. The problems with these levels were elucidated, but no alternative proposals were made. The quotas for the Southern Hemisphere were especially uncertain since the committee had little time to consider the data.²⁰⁰ As a consequence, calculations were incomplete and the committee was unclear as to what recommendations to make.²⁰¹

The committee's vaguely formulated information provided much controversial material for the Commission meeting. In response to the threat of a reduced Western North Pacific quota, the Japanese Commissioner, Mr. Yonezawa, proclaimed: "[The] life and death of [our] coastal stations [are] at stake. We need, we demand and [we have] the right to call for a special meeting of [the] Scientific Committee. Otherwise we cannot accept any recommendations coming from the Com-

198. The NMP was not intended to operate only to stop whaling after the population has been reduced below MSY. Sustained Management Stocks are those "which should be maintained at or near MSY levels" and commercial whaling is to be permitted at these levels "without risk of reducing them below this level." *Chairman's Report of Twenty-Sixth Meeting*, [1974-1975] TWENTY-SIXTH REP. COMM'N 26 (Int'l Whaling Comm'n). As the scientific representative of the IUCN noted in a later statement to the Commission,

[C]learly classification of stocks as sustained or initial management with appropriate quotas is absurd in cases where recruitment [births] will decline even in the absence of harvesting. It is, therefore, important that the Commission does not interpret its rules too legalistically and that the spirit not the strict letter of the law of the New Management Procedure should be followed in setting quotas.

Statement by IUCN to the Special Meeting of the International Whaling Commission, Dec. 19, 1978, Doc. IWC/SPEC 78/9.32, at 3. In fact, since the procedure refers to the stocks being "maintained" above these levels, the "letter" would seem to require consideration of birth trends.

199. *Japan Denies, Panama Withdraws*, *ECO*, June 27, 1978, at 1, col. 2.

200. Since the Scientific Committee has only a short two-week period in which to do its work, this is not an uncommon problem.

201. See [1978] CHAIRMAN'S REP. THIRTIETH MEETING 5 (Int'l Whaling Comm'n). The committee made interim recommendations. *Id.* at 5-8.

mission.”²⁰² This statement raised the real issue—another meeting. Unfortunately, the Southern Hemisphere season would already have commenced by the time another special meeting could be held in December. The Whale Protection Fund offered to finance an earlier meeting, but, although the suggestion was briefly entertained, it was eventually rejected. Instead, the Commission agreed to another special meeting in Tokyo, while instituting a general ten-percent reduction in sperm whale quotas for the Southern Hemisphere, imposing a twenty-five percent reduction in two specific areas for which data had been analyzed,²⁰³ and establishing no quotas for the North Pacific.²⁰⁴ Industry again had triumphed over the pretense of scientifically based conservation. The Argentine delegate was perplexed: “We are arriving not at a matter of scientific competence but at a political approach. Why do we have to accept sometimes a political approach?”²⁰⁵

One of the answers to this question was that the United States was again preoccupied with the bowhead controversy. In the year since the aboriginal exception had been revoked in Canberra, the Alaskan Eskimos had abided by the IWC quota, and the United States government had undertaken extensive research on the Arctic bowhead population. The research was still incomplete, but it indicated a larger population than previously had been estimated. The United States presented a minimum estimate for the bowhead population of 2,264 whales.²⁰⁶ This figure exceeded by 500 the previous high guesses but was still a very small proportion of the estimated original population.

The United States again proposed to place authority over the quota back in its own hands—this time asking the Commission to set a “guideline” of two percent of the estimated population (about forty-five whales) within which it would set quotas adequate to meet aboriginal needs. The Scientific Committee reiterated its position that, on biologi-

202. Author's Transcript of Technical Committee Meeting 21 (June 30, 1978).

203. [1978] CHAIRMAN'S REP. THIRTIETH MEETING 5 (Int'l Whaling Comm'n). These levels were agreed to only after the Commission had repeatedly sent the issue back to the Scientific Committee requesting firm recommendations. Some recommendations were required of the Committee by the Commission in order for the Commission to operate according to the “scientific” processes of the New Management Procedure. Many scientists were angry at this unscientific role being thrust upon them. This is an example of “science” being used as a facade for legal and political decisions.

204. *Id.* at 8-9.

205. Author's Transcript of Technical Committee Meeting 14 (June 29, 1978). Australia's Commissioner, Mr. Arthur Bollen (who was at the time also the Chairman of the Commission) remarked that the debate on the quota and the date for convening a special meeting was “our worst performance since my joining the IWC in 1966.” *Id.* at 27. The debate was lengthy and acrimonious even by the standards of the IWC. For a perceptive commentary on this debate, see *Political Science*, ECO, June 30, 1978, at 1, col. 17.

206. Author's Transcript of Technical Committee Meeting (June 27, 1978).

cal grounds, no whales should be taken,²⁰⁷ and there was fierce disagreement over figures. The Eskimos from the U.S. delegation argued that the population was even larger than the figure presented, while others argued that the proposed two-percent guideline far exceeded the survival rate of newborn whales and that it was not justified on the basis of aboriginal needs.²⁰⁸ The debate was painful to conservationists who saw their champion neutralized again. Not only had the U.S. scientists performed with minimal zeal in the Scientific Committee, but the United States was receiving support on its proposals from the whaling nations—support that must have had a price.²⁰⁹

The Commission recognized the difficult questions raised by the aboriginal issue and agreed to create a working group to study the matter and try systematically to reconcile preservation goals with the needs of indigenous peoples.²¹⁰ The issue had created rifts even among environmental groups,²¹¹ and it was clear that to bridge these gaps some balanced approach was necessary.

A long, vituperative debate over the level of allowable kill ensued. When the Technical Committee accepted a quota of twenty-four landed with no limit for "struck" whales,²¹² the Eskimos walked out and denounced the Commission. The U. S. Commissioner, Mr. Frank, again in a difficult situation, pleaded with the Commission: "There will be blood on all our hands," he told the meeting, "and it will be the blood of more whales than we are talking about here."²¹³ Nevertheless, after much debate and numerous votes, the Commission lowered the figure provided by the Technical Committee to eighteen landed or

207. *Report of the Scientific Committee*, Doc. IWC/30/4, Agenda Item 12.1. See *Report of the Sub-Committee on Protected Stocks*, Doc. IWC/30/4, Annex G, at 1 (1978).

208. These arguments were made in debates and in private papers and thus do not appear in official documents.

209. The support was evident in the many proposals and votes that occurred throughout the debate. Japan and the U.S.S.R. consistently voted with the United States, and Denmark and Norway also provided support. In one awkward and amusing moment, the U.S.S.R. was called to vote before the United States, and it postponed its vote until the Americans had declared their position and then voted with them. Author's Transcript of Technical Committee Meeting 17 (June 29, 1978).

210. [1978] CHAIRMAN'S REP. THIRTIETH MEETING 13 (Int'l Whaling Comm'n).

211. Perhaps the most notable split came after the American branch of the Friends of the Earth (FOE) officially recommended that the United States file an objection to the Canberra bowhead decision, a position that had been opposed by other FOE branches and other environmental organizations.

212. When a quota is accepted by a majority vote in the Technical Committee, it is considered again only in plenary. If defeated there, other suggested quotas will be considered. Often the meeting of the Commission will shift from Technical Committee to plenary and back to Technical Committee again.

213. Author's Transcript of Technical Committee Meeting 17 (June 29, 1978). Mr. Frank was referring not only to the larger kill threatened by the Eskimos but also to the possibility of violence against the U.S. marshals who would have to police the hunt.

twenty-seven struck.²¹⁴

There was extensive debate on other whale quotas as well. The sei whales in the Southern Hemisphere were, after years of exploitation, accorded protection status.²¹⁵ This move was not unexpected, but Japan strongly objected, again alleging that its scientists had been given short shrift in the Scientific Committee discussions. The report of the committee on the sei whales was unequivocal, nevertheless. Largely as a result of the efforts of the IUCN scientist, Dr. John Beddington, the committee concluded that this whale species was far more seriously depleted than had previously been thought.²¹⁶ In contrast, the population of the minke whale was believed to have increased slightly as a result of a vacuum left in the Antarctic ecosystem by the depletion of its competitors, and thus the Commission raised the quota for this species by about ten percent.²¹⁷ The California gray whale was moved from protection to sustained management status and was given a quota of 178.²¹⁸

Two other issues were noteworthy. First was the proposal to discuss the "ethics of killing cetaceans."²¹⁹ Unfortunately, the Scientific Committee was unprepared to discuss this matter, not only because of its lack of expertise in the relevant areas, but also because of the lack of time for preparation. Two eminent scientists, however, did tell the committee that "[t]here exist sufficiently compelling neuroanatomical and neurophysiological reasons to assume a high intelligence potential in the species of great whales presently hunted."²²⁰ Although these facts were given very little attention, it was agreed to prepare for a more thorough consideration of the matter in 1979.²²¹

A second issue was the perennial matter of enforcement. Prior to the meeting, a news item appeared in the London *Sunday Times* reporting that a prominent British scientist had received a letter from a scien-

214. [1978] CHAIRMAN'S REP. THIRTIETH MEETING 13 (Int'l Whaling Comm'n).

215. *Id.* at 6.

216. The report of the Scientific Committee refers to a "reduction in 3 areas from an average stock size of about 11.4 thousand (over the period 1965 to 1967) to 5.1 thousand in 1976." *Report of the Scientific Committee*, Doc. IWC/30/4, Agenda Item 10.1.

217. Compare [1978] CHAIRMAN'S REP. THIRTIETH MEETING 7 (Int'l Whaling Comm'n) with [1977] CHAIRMAN'S REP. TWENTY-NINTH MEETING 5 (Int'l Whaling Comm'n).

218. *Id.* at 14. This is the one population of whales to recover from a state of depletion, and its annual migration along the California coast is now a tourist attraction. This change in status has caused great concern among American environmentalists.

219. This item had been placed on the agenda by the Panamanian Commissioner, Mr. Fortom-Gouin.

220. *Are Scientists As Smart As Whales?*, ECO, June 27, 1978, at 3, col. 2. The two scientists were Dr. Peter Morgane, Senior Scientist at the Worcester Foundation for Experimental Biology and a pioneer in microneuroanatomy, and Dr. Georg Pilleri, director of the Brain Anatomy Institute of the University of Berne, editor of the *Journal of Cetology* and of the eight-volume *Investigations on Cetacea*. *Id.* at cols. 2, 3.

221. [1978] CHAIRMAN'S REP. THIRTIETH MEETING 16 (Int'l Whaling Comm'n).

tific worker aboard a Soviet factory ship alleging that his captain "and the National Inspectorate [were] breaking the laws of the whaling industry. As a result of the 1977/78 season there were obtained more than the quota of whales: 1095 sperm whales, 167 sei whales, 654 minke whales. And similarly they are hunting young animals and females accompanying their young."²²² The Commission simply referred the charge to the secret sessions of the Infractions Subcommittee of the Technical Committee. Despite the charge's implications for enforcement and for the entire basis of accurate scientific management, without hard evidence, the Commission took no further action on these allegations.

Another article had appeared in the *Sunday Times* describing Japan's practice of relying on pirate whalers.²²³ It outlined the corporate connections between a vessel recently transferred to Chile and Japanese whaling interests. Nevertheless, the Commission took no action, apparently appeased by a recent voluntary "administrative guidance"²²⁴ that the Japanese government offered as evidence that it intended to reduce its importation of whale products from non-IWC members.

Between the end of the thirtieth annual meeting and the second special meeting in Tokyo in December, Australia announced that it was withdrawing from whaling.²²⁵ Since the Canberra meeting in 1977, the protest organized by Project Jonah against Australian whaling policy had grown into a significant national issue. With the controversy showing no sign of abating, the government had appointed a national Commission of Inquiry that would operate under the direction of the respected Australian judge, Sir Sidney Frost. That Commission conducted extensive hearings and investigations and participated in the 1978 meetings of the Scientific Committee and the IWC. Meanwhile, coordinated protests by environmental organizations around the world brought great pressure on the Australian whaling company at Cheynes Beach, and there were rumors that it was running into financial troubles. In England, Friends of the Earth was continuing its protest against that country's importation of sperm whale oil, and it had instituted a boycott of companies using the product. The uncertainty of the

222. *Russian Accuses Soviet Whalers*, The Sunday Times (London), June 18, 1978, at 21, col. 4.

223. *How Whale Killers Sail Around the Law*, The Sunday Times (London), March 19, 1978, at 21, col. 1.

224. The guidance is referred to in *Review of Recent Efforts to Protect Endangered Species: Hearings Before the Subcomm. on International Organizations of the House Comm. on Foreign Affairs*, 96th Cong., 1st Sess. 105 (1979) (statement of Alan Macnow).

225. The Australian government announced plans to prohibit whaling within its 200-mile fishing zone and to "pursue a policy of opposition to whaling." PARLIAMENTARY DEBATES (April 4, 1979) (remarks of Malcom Fraser, Prime Minister).

trade was visibly demonstrated when a large shipment of Australian-produced sperm whale oil from the 1977-78 season found its way to Portland, Oregon and then to Vancouver, Canada where it was off-loaded. In Portland, the ship's master was charged with importing a prohibited product, and in Vancouver, the Greenpeace Foundation threatened to blockade any ship attempting to pick up the cargo. Ship after ship refused to try, and the recovery of the oil was stalled for months.²²⁶ These problems, when combined with the evidence presented to the Scientific Committee on the declining sperm whale populations, revealed a very unstable corporate future. Thus, in November 1978 the Australian whaling company announced that it was ending its operations. One month later, Sir Sidney Frost presented his report, and his conclusions were unequivocal: "The Inquiry's central conclusion is that Australian whaling should end, and that, internationally, Australia should pursue a policy of opposition to whaling."²²⁷

At the second Tokyo special meeting, which took place shortly after the announcement of the new Australian stance, the Commission was faced with an uncompromising report from an invigorated Scientific Committee. The bowhead issue was absent from the agenda for the first time since 1976, and the Scientific Committee report reflected the reduced political pressure.²²⁸ The report openly proclaimed the great uncertainty underlying the Committee's work:

The Committee was increasingly finding itself in the position of having to offer advice to the Commission based on less than complete data in the form of "best" or "more conservative" or "more reasonable" estimates. Some members of the Committee thought that in these circumstances the reasons for deciding between one or more alternatives were sometimes not based solely on scientific evidence. It was felt that it would be more scientific to present the Commission with a range of options and a clear indication of the weaknesses of the data which prevented a firm recommendation being given.

. . . The Commission should also be made more fully aware of the difficulties under which the Scientific Committee had to operate in providing stock assessments as required under the new management procedure, given the current state of knowledge, the lack of a firm data base, and the relatively few people undertaking data analysis between meet-

226. The *Stolt Spur* had put into Portland in September 1977 carrying 1,200 tons of sperm whale oil. This entry was contrary to the Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1543 (1976), which forbids the transportation of the substance in American territorial waters. When rebuffed in Portland (the captain was later fined \$8,000) the ship went to Vancouver and offloaded its cargo. It was finally picked up in late January 1978. See *Sperm Whale Oil: Illegal Cargo Skipper Faces Spread-the-Word Campaign*, Vancouver Sun, March 28, 1978, at C2, col. 1.

227. 1 WHALES AND WHALING, *supra* note 27, at 206.

228. *Scientists Say*, ECO, Dec. 19, 1978, at 1, col. 2, states that "the role of U.S. scientist, Dr. Douglas Chapman, chairman of the Marine Mammal Commission, was crucial to this scientific honesty."

ings.²²⁹

The Commission was aware of these difficulties already, since they had been pointed out for years. But now its own Scientific Committee had explicitly recognized them. The point was quickly reinforced in a paper from Dr. Lee Talbot, a respected American scientist who for years had been a member of the U.S. delegation to the Commission and the Scientific Committee. Now representing the World Wildlife Fund, Dr. Talbot was blunt in his criticism:

[I]t now appears that this reliance on the [advice of the Scientific Committee] may itself pose the greatest current threat to the whales. The reason for this seeming paradox is the status of our knowledge—or lack of it . . . The fact that we rely on scientific advice has come to be used as the justification for continued whaling and to provide the IWC with a sense of security. . . .

But what many fail to realize is that these statistics are based on gross assumptions, which may lead to truly gross uncertainties, and the link between the resultant figures and reality may be tenuous indeed.

. . . [T]he hard fact is that the quotas are in no way scientifically safe, and they are clearly continuing to deplete the remaining stocks—not sustain them.²³⁰

The message to the Commission was made even clearer in the discussion by the Scientific Committee of the state of the sperm whales. The committee affirmed the hypothesis of a declining pregnancy rate in sperm whales in both the Southern Hemisphere and the North Pacific.²³¹ The Commission agreed fairly easily on a zero quota for the former area since it acknowledged that even with a zero quota, the population there would continue to decline for thirty to forty years. The decision was no doubt made easier by the reduced economic consequences that would follow a cessation of whaling in that area since Australia had ceased its operations.

By contrast, Japan resisted any reduction in the quotas for the North Pacific (with the quiet support of the Soviet Union), despite the great uncertainty concerning the health of whale populations there. The committee's report was filled with references to "inconsistencies,"

229. *Report of the Scientific Committee*, Doc. IWC/SPEC 78/4, at 5. This outburst was at least partially in reaction to the situation in London earlier in the year in which the Scientific Committee was forced to come up with a figure for the Southern Hemisphere sperm whales, despite the evident lack of a scientific basis for it. The committee noted that population estimates for unexploited female sperm whales had varied within a few years from 100,000 to 450,000.

230. Doc. IWC/SPEC 78/9.36, at 2-3. Dr. Talbot also cited a resolution passed in September-October 1978 by the 14th General Assembly of the IUCN which reiterated the call for a moratorium. *Id.* at 5.

231. [1978] CHAIRMAN'S REP. SPECIAL MEETING 4-6 (Int'l Whaling Comm'n). The decline was apparent in Division 5 of the Southern Hemisphere, *id.* at 9, and in the Western North Pacific. [1978] CHAIRMAN'S REP. THIRTIETH MEETING 8 (Int'l Whaling Comm'n).

"very limited samples," "considerable variation in stock estimates," "inability to assess the consequences," and "lack of information on the reliability of the estimates."²³² The conclusion, however, was not strong:

In view of the substantial scientific uncertainty on both the population estimates, and the validity of the assumptions on the population response, most members of the Committee recommend that the Commission set male quotas conservatively, certainly not higher than the 1978 quotas, and that it reduce female quotas to zero. . .²³³

In both the Technical Committee and plenary, arguments were heated. The credibility of the Scientific Committee's recommendations was challenged, and the failure of the Japanese fleet to catch the limit of its current quota was questioned. Japan repeatedly interjected that the bowhead whale was the real problem. That issue, however, was not on the agenda and Commissioner Frank was free to insist upon a reduction in the sperm whale quota and thereby placate the conservationists whose criticisms had been undermining his security at home.²³⁴ Mr. Frank pointed out that the Japanese pelagic fleet had not come close to reaching its quota the previous season: "This perhaps indicates that the sperm whales aren't there to be seen, killed, and harvested."²³⁵ The final result was a decrease of forty-one percent²³⁶—sufficient to keep the pelagic fleet alive in the North Pacific for at least another season. Thirty-eight hundred whales were allowed to be killed,²³⁷ seventy-one percent in the Western and twenty-nine percent in the Eastern North Pacific.²³⁸ Females were not to be taken except incidentally (and to a limit of 11.5%) in filling the male quota.²³⁹ In a compromise between uncertainty,²⁴⁰ ominous prediction, and industry interest, the latter still carried greater weight.

232. *Report of the Special Meeting on Sperm Whale Assessments*, Doc. IWC/SPEC 78/4, at 13.

233. *Id.*

234. Many argued that the Commissioner had been receiving such bad press on the whale issue that his tenure was possibly at stake. The impact is difficult to assess, but see the article by the Fund for Animals' Lewis Regenstein, *Selling Out the Whales*, Wash. Post, Sept. 14, 1978, at A23, col. 1.

235. Author's Transcript of Debate (Dec. 19, 1978).

236. *Compare* [1978] CHAIRMAN'S REP. SPECIAL MEETING 5 with [1977] CHAIRMAN'S REP. SPECIAL MEETING 3 (Int'l Whaling Comm'n).

237. [1978] CHAIRMAN'S REP. SPECIAL MEETING 5 (Int'l Whaling Comm'n).

238. *Id.*

239. *Id.*

240. The United States proposed requiring full disclosure of data as a prerequisite to setting a quota, but this proposal was challenged by Japan as contravening article V of the convention. As a result, the proposal was postponed until the Commission had received legal advice. Rather than contravening this article, however, such a provision would be in keeping with it, since the article is intended to "provide for the conservation" of whales "based on scientific findings." 1946 Whaling Convention, *supra* note 47, art. V, para. 2 (emphasis added).

Another notable issue at the special meeting was Japan's continued recourse to "pirate" whaling. In the past, Japan had easily shunted aside criticisms of its illegitimate activities by promising to discourage both transfers of equipment to and imports of products from nonmembers. At the meeting, Japan's failure to observe these promises became clear. Again, the invigorated U.S. Commissioner led the debate, pointing out that thirteen percent of the world catch was taken by non-IWC members and charging that

[t]he government of Japan, for example, has been unsuccessful in halting the importation of whale meat from nonmember countries. Indeed, Japanese imports in the first eight months of 1978 were considerably higher than a year ago. We also have allegations that expertise, manpower, bank loans and funds from an IWC member are used to aid the *Sierra*, one of the most notorious of the so-called pirate whaling operations.²⁴¹

Noting that the Commission's resolutions "failed to have the needed impact," the United States proposed comprehensive changes in the Schedule.²⁴² Legal objections were raised, and pending their resolution, only a few changes were accepted.²⁴³

In the history of whale conservation, 1979 will very likely mark a decisive turning point. Conservationism had become a very powerful force at the IWC. Although the negotiations of that year produced only another incremental decline in the quota level, the process of achieving that reduction and the nature of the quota itself represent a major change from the past.

The most obvious change in the Commission in 1979 was its new membership—up six from the previous year to twenty-three members. Two new members, Sweden and the Seychelles, had joined specifically to advance the cause of whale conservation and were active in doing so. Four of the new members—South Korea, Peru, Chile, and Spain—were whaling countries that had previously operated outside the auspices of the Commission. Their membership was an indication of the change in the IWC since they joined in part to bolster the Japanese position. Indeed, Chile joined on the Friday before the conference be-

241. Doc. IWC/SPEC 78/9.2, at 3. Imports of whale meat into Japan from non-IWC members in 1978 were 42% higher than in 1977. C. VAN NOTE, *supra* note 160, at 3.

An ironic incident in this tale of intrigue and evasion was not discussed at the meeting. Although the *Sierra* had usually worked alone as a combination catcher and factory ship, it was joined in 1978 by another vessel, the *Shunyu Maru*, renamed the *Tonna*, which was to take over the processing function. After assuming its duties, the vessel was winching aboard a large fin whale which caught in a swell and caused the boat to list over and flood. In a scene reminiscent of *Moby Dick*, the ship soon went to the bottom, taking with it the Norwegian captain as he stood on the bridge with a beer bottle in hand. C. VAN NOTE, *supra* note 160, at 14. Norway supplied both the captain and harpoons to the *Tonna*. *Id.* at 13.

242. Doc. IWC/SPEC 78/9.2, at 3.

243. [1978] CHAIRMAN'S REP. SPECIAL MEETING 23-25 (Int'l Whaling Comm'n).

gan and Spain on the Saturday, just two days before the meeting opened. Freedom to whale outside the Commission's authority was being sacrificed to ensure survival of whaling within it.²⁴⁴

The addition of the new prowhaling nations was counterbalanced by a change in policies among a host of old members. Three moratorium proposals on the agenda reflected this second major change in 1979. Australia's dramatic reversal has been described, but now it was joined by New Zealand, the United Kingdom, and the United States. Validating the criticism that long had been made by conservationist critics, these policy changes flowed from the recognition that the New Management Procedure simply was not working. This fact was made clear by these states in their statements of support for the moratorium proposals. Nevertheless, old interests had not died, and support for the moratorium was not unqualified.²⁴⁵

A third significant change in the Commission was the improved effectiveness of the nongovernmental organizations. New groups had offered financial backing to the whale conservation cause, and this support affected both the topics put on the Commission's agenda and the coordination of the conservation lobby itself.²⁴⁶ The involvement of the Stern Fund of New York, for example, enabled the environmental groups to begin active preparation well in advance of the meeting.²⁴⁷ At the meeting itself, NGO participation was more widely representative of IWC membership and better organized than ever before.

The improved effectiveness of the conservation lobby also resulted from the work of the environmental groups themselves. A coordinating group, the Marine Action Centre, had been founded after the 1978 London meeting. The Centre had been a focal point for preconference activities. In addition, the recent actions of the London-based Green-

244. With these four new members and the U.S.S.R., Japan felt assured of a quarter of the votes—6 of 23—which could block IWC action. Five votes would not have been enough; this may explain Spain's last minute entry.

245. This was evident with both the United Kingdom and the United States. The U.K. had let it be known before the conference that it was going to support the moratorium and ban the importation of sperm whale oil. *Britain Ready to Outlaw Whale Oil*, *The Observer* (London), July 8, 1979, at 1, col. 2. At the opening session of the Commission, conservationists were stunned to hear that the U.K., while supporting the moratorium, would only "seek" a ban on sperm whale oil products in conjunction with the other members of the EEC. See *Britain Rejects Ban on Whale Oil Imports*, *The Guardian* (Manchester), July 10, 1979, at 1, col. 8. The United States was, of course, still concerned with the bowhead problem.

246. The Royal Society for the Prevention of Cruelty to Animals (RSPCA) and the People's Trust for Endangered Species (PTES) contributed some matching funds. The London-based Threshold Foundation was also instrumental, acting in close cooperation with the Seychelles delegation, which took a leading role in the negotiations.

247. The Stern Fund hosted a meeting of NGO's in Washington on April 18. Along with RSPCA and PTES, it allocated funds to a variety of lobbying activities over the next three months. This was evident in the coordination of the NGO's, the preparation of briefing documents, and the facilities available to the organizations.

peace group had crystalized public awareness in Europe on the whale conservation issue. By 1979, public awareness in the whale conservation issue had reached a high point. When Friends of the Earth, which had maintained the whale lobby since 1972, organized a whale rally in London the day before the conference opened, 15,000 people attended.²⁴⁸ Media interest was high.

Three major issues confronted the delegates at the conference: the moratorium, bowhead whales, and pirate whaling. The U.S. proposal for an indefinite moratorium on commercial whaling was the broadest in scope and represented a clear change in policy; the U.S. delegation was rejecting the New Management Procedure only four years after it had come into effect. Citing NMP's numerous deficiencies, including absence of data and research, ignorance of the ecosystem and whales' social behavior, and uncertainty about the long-term consequences of present whaling, the U.S. Commissioner recounted the familiar history of IWC management failures. He concluded that the "IWC has adopted a number of management regimes but has been unwilling to abandon a scheme even when it has become inadequate and was doing damage."²⁴⁹

Similar reasoning led Australia to adopt a policy favoring a permanent ban rather than a temporary moratorium. Australia's actual proposal to the Commission, however, called only for a study of the effects of a ban and the best means to institute one. Because the proposal was in anticipation of future action and was less controversial than the U.S. proposal, it was later accepted.²⁵⁰

It was the twofold "Seychelles Initiative" that, in addition to the American moratorium, provided the greatest interest. The first part of the initiative was a proposal to create a whale sanctuary in the Indian Ocean. Having seen its local population of sperm whales depleted by whalers from distant nations, the Seychelles now argued that whaling in the area should be stopped, especially since none of the nations bordering that ocean were engaged in whaling operations. By creating a sanctuary, the IWC would be allowing the ecological interests of coastal nations to prevail over the purely economic interests of distant exploiters.

The second part of the initiative—even more controversial—was a three-year ban on sperm whaling. The Seychelles delegation put the conservationist argument succinctly: with their huge brains and their complex social structure, sperm whales were unique creatures and yet were being subjected to inhumane, unnecessary, and dangerous ex-

248. See *Friends of the Whale Gather in Protest*, *The Guardian* (Manchester), July 9, 1979, at 2, col. 3.

249. Author's Transcript of Technical Committee Meeting (July 11, 1979).

250. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 4, 24 (Int'l Whaling Comm'n).

ploitation. Available data were totally inadequate, although it was estimated that whaling nations possessed enough raw material from dead whales (primarily teeth and ovaries) to occupy scientific analysis for three years. The delegation suspected that these whales had been overhunted and that a pause was needed in order to assess the situation. The proposal, if accepted, would have dealt a death blow to the coastal whaling of three new members: Spain, Peru, and Chile. It would also have reduced by half the overall quota for the pelagic fleets. This proposal would not be accepted easily, but support for it came indirectly from an unexpected quarter. For the first time ever, the Scientific Committee was so confused by the data it had that it was unable to recommend quotas for all but a few of the sperm whale populations.²⁵¹

The second major issue was again the bowhead whales. The Scientific Committee report reiterated its call for a zero quota,²⁵² but a special Technical Committee working group²⁵³ had endorsed the American demand for a quota of "20 landed or 27 struck [but lost], whichever occurs first."²⁵⁴ The report of this latter group was heavily criticized. Biologically, a quota of twenty and twenty-seven would be highly damaging; culturally, few saw it as necessary; politically, the United States wanted it. Although there was little discussion of the bowhead quota, the American demand overshadowed all other political calculations.

The third issue confronting the delegates was the continued Japanese use of "pirate whalers." To the public, this matter now held center stage. The British conservation organization, the People's Trust for Endangered Species, had obtained detailed evidence of the operation of the *Sierra*, and the London Greenpeace organization had film footage of that ship's crew harpooning protected and undersized whales. The Washington-based Monitor Consortium had compiled this and other information and presented the conference with a booklet exhaustively analyzing the *Sierra's* operations and those of other non-IWC whalers.²⁵⁵ The evidence pointed in one direction—to Japan's Taiyo Fisheries Company, the largest privately-owned fisheries company in the

251. See *Report of the Subcommittee on Sperm Whales*, Doc. IWC/31/4, Annex F; *Report of the Scientific Committee*, Doc. IWC/31/4, at 13-15. The subcommittee did recommend two small quotas for males for two areas of the Southern Hemisphere, *id.* at 14, and the Subcommittee on North Atlantic Whales approved the continuation of past levels in the North Atlantic. *Id.* at 7.

252. *Report of the Scientific Committee*, Doc. IWC/31/4, at 26; *Id.*, Annex H, at 3.

253. The working group was composed of 13 Americans and only 11 non-Americans. Few disinterested parties participated, and the report was cursory. See *Report of the Technical Committee Working Group on Subsistence/Aboriginal Whaling*, Doc. IWC/31/5/WG1, at 4..

254. *Id.* at 6.

255. C. VAN NOTE, *supra* note 160, at 14.

world. Despite the Japanese government's promises to stop the illicit trade, Taiyo was involved in every pirate operation, and Japanese imports of whale products from non-IWC countries had substantially increased between 1977 and 1978.²⁵⁶

As the Commission turned to consider these issues, it was evident that a different atmosphere pervaded the group. With the moratorium proposals finally on the agenda and with so many conservationist countries and twenty-six nongovernmental organizations involved in the negotiations, the whaling industry was on the defensive. Yet the bowhead issue was again on the agenda, and the underlying uncertainty was the U.S. position. This uncertainty was short-lived. By the evening of the first day a U.S. compromise proposal was being discussed: a complete commercial moratorium, but to take effect only after three years. Although denied by officials, many viewed the weaker proposal as the result of a political trade with Japan in exchange for its support on a bowhead quota.²⁵⁷ Intensive conservationist lobbying quickly forced the United States to withdraw the proposal.²⁵⁸

The first of the moratorium proposals to be considered formally was the Seychelles' sanctuary for the Indian Ocean. This caused surprisingly little controversy, especially after it was amended in private negotiations. Neither the Japanese nor Russian pelagic fleets regularly entered this area except in its more southerly Antarctic reaches. By agreement, a southern boundary was set of fifty-five degrees south latitude,²⁵⁹ thereby excluding the pelagic minke whale grounds from the sanctuary. With the further qualification that the sanctuary would last for ten years and be reviewed in five years, the proposal was accepted overwhelmingly.²⁶⁰ The passage of this moratorium was an important

256. Japanese imports increased from 7,323 metric tons in 1977 to 10,434 tons in 1978. *Id.* at 3. The report also pointed to the involvement of Lloyd's of London insurers, Norwegian bankers, and South African repair yards. *Id.* at 14.

257. Maxine McCloskey, Executive Director of the Whale Center in Oakland, California, testified before a House subcommittee in 1980 that the U.S. delegation to the IWC voted inconsistently with declared policies in seven instances in order to "buy votes from whaling nations on the bowhead whale quota [issue]." *Preparations for the 32d International Whaling Commission Meeting: Hearings Before the Subcomm. on International Organizations of the House Comm. on Foreign Affairs*, 96th Cong., 2d Sess. 22, 24 (1980) (statement of Maxine McCloskey).

258. The compromise fell far short of the original proposal. Not only would it have allowed sperm whales to be hunted for another three years—a dangerously long time if they were as depleted as many believed—but it might not have been enforceable. A similar delayed scheme had been accepted in 1962 when it was agreed to abide by the recommendations of the Committee of Three. This scheme was revoked in 1964 when the recommendations were found to be too stringent. The proposal, therefore, was both dangerous and unreliable.

259. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 6-7 (Int'l Whaling Comm'n).

260. *Id.* The proposal was accepted in the Technical Committee by a vote of 14 to 4 (enough to pass in plenary). Later it was passed in plenary, 16 to 3. ECO, July 14, 1979, at 2-3 (votes 6 and 19). Japan protested against the sanctuary, arguing that whaling was neces-

step toward conservation, and it established a powerful precedent for further actions.²⁶¹

The original U.S. moratorium proposal was obviously too sweeping to stand a chance of passage without some amendment. Soon after the introduction of the proposal, Panama presented a compromise similar to its own proposal of the previous year. The Panamanian amendment divided the moratorium into two parts: a pelagic and a coastal moratorium. This sparked a lengthy debate on procedural matters,²⁶² but the amendments were allowed to stand and were referred to the Scientific Committee for advice. Intensive private negotiations ensued, and a further compromise was struck. With the reconvening of the formal sessions, Denmark amended the pelagic moratorium to exclude minke whales, and the Commission eventually accepted that proposal in plenary by vote of eighteen to two. Although the coastal moratorium was defeated, the International Whaling Commission, seven years after the Stockholm Conference, finally had accepted a partial moratorium.²⁶³

Japan and the Soviet Union had criticized the moratorium as "discriminatory,"²⁶⁴ but the sperm whale populations were acknowledged to be in trouble, a sizable quota was not likely in any event, and the more plentiful minke whale had been exempted from the moratorium. Eventually the Commission adopted a quota for the Southern Hemisphere of 8,102 minke whales despite some doubts in the Scientific Committee.²⁶⁵ This figure exceeded the previous year's quota of

sary to control the whale populations. The representative of the crowded Japanese nation asked, "What would happen if the human population were allowed just to grow and grow?" Author's Transcript of Meeting (July 10, 1979).

261. One of the effects of the sanctuary is to establish international and regional control over an area that previously was a commons. Similar to the establishment by the U.N. shipping agency, IMCO, of "special areas" (where no oil discharges are allowed), this sanctuary elevates regional interests and integrated international control over national interests and shifts responsibility from the conserver to the exploiter.

262. The Chairman declared the proposed amendment out of order, and his ruling was upheld by a vote of 12 to 9. Two non-English speaking delegations, however, had been confused in the vote (having voted yes on the Chairman's ruling when they thought they were voting yes for the amendment itself) and requested to change their votes. This would have retained the amendment by defeating the Chairman's ruling 10 to 11. After a second vote on whether a delegation could change its vote after the roll was completed, the votes were allowed to be reversed and the amendment was kept alive. Author's Transcript of Meeting (July 11, 1979); [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 3-4 (Int'l Whaling Comm'n).

263. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 4 (Int'l Whaling Comm'n).

264. Author's Transcript of Plenary Meeting (July 11, 1979).

265. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 9 (Int'l Whaling Comm'n). The new quota was set despite a minority report arguing that the quota should have been based upon a different analysis of population boundaries. The alternative analysis produced a quota of 6,319 whales. *Id.* See *Report of the Scientific Committee*, Doc. IWC/31/4, at 12; *Report of the Subcommittee on Minke Whales*, Doc. IWC/31/4, Annex G, at 21.

6,221,²⁶⁶ and it would be enough to keep Antarctic pelagic fleets in operation.

Having accepted the pelagic moratorium, the Commission addressed the Seychelles' sperm whale moratorium proposal. Sperm whales could still be taken by shore stations in Japan, Iceland, Spain, Chile, and Peru. With the reports of low population levels in most of these areas, closure of these operations was a high priority for many observers. The conference was in its fourth day, and the commissioners, anxious to reach a solution out of reach of the intense lobbying, withdrew into closed sessions.²⁶⁷ In these private discussions, the proposal was defeated.²⁶⁸ Many reported that the intransigence of Iceland, which insisted upon retaining its small sperm whale quota, finally sank the proposal. Despite the greater moderation of the Scandinavian states at the 1979 meeting, this proposal hit them directly, although only in a minor way.²⁶⁹

The moratorium was the visible focus of the Commission's activities. The bowhead issue was discussed openly and in detail only on the last day of the conference. At that time, the United States came under heavy attack, particularly from the Australians, who criticized the "wasteful and inhumane"²⁷⁰ aboriginal hunt. The United States, however, was firm—it even privately threatened to file an objection. In any event, the decision had been made. At midnight, with little discussion, the quota was passed: eighteen killed or twenty-six struck but lost.²⁷¹

The pirate whaling issue proved as intractable for the Commission as ever. Although this was the issue that had sparked public interest, it had been effectively defused within the Commission. Japan had finally announced a ban on trade in whale products with nonmembers on July 5, four days before the conference began. This declaration appeared to promise action, although the "allowance for existing contracts" provided a loophole of indefinite scope. Four of the major non-IWC whaling nations had joined the Commission, leaving only Taiwan, Portugal, and the *Sierra* with its three sister ships still skirting the regulations. Facing the same legal problems that had prevented a Schedule

266. [1978] CHAIRMAN'S REP. OF THE THIRTIETH MEETING 7 (Int'l Whaling Comm'n).

267. *ECO* responded angrily to the sudden secrecy with an article entitled *What Are You Hiding?*, *ECO*, July 13, 1979 at 1, cols. 2 & 3.

268. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 7 (Int'l Whaling Comm'n).

269. Many conference participants attributed the generally moderated Scandinavian performances to the expeditions of Greenpeace against the Icelandic whaling fleet, the efforts of American groups in the Danish and Norwegian media, and the presence of Sweden at the Commission. On the sperm whale quotas, however, Iceland was intransigent, and Danish Commissioner Lemche repeatedly opposed not giving the newcomers Chile and Peru any quota.

270. Author's Transcript of Technical Committee Meeting (July 13, 1979).

271. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 14 (Int'l Whaling Comm'n).

change in Canberra,²⁷² the Commission took no action. Only days after the meeting ended, however, an American ship found the *Sierra* off the coast of Portugal, and, after a long chase, caught and rammed it. The *Sierra's* days were over.²⁷³

The conclusion of the 1979 conference sealed a victory for the conservationists, but it had come late in the industry's history and was not complete. Despite adopting the pelagic moratorium and establishing the Indian Ocean sanctuary, the Commission increased the minke whale quota and maintained other quotas,²⁷⁴ leaving the total 1979 quota at 15,891 whales—fewer than 4,000 below the 1978 quota. This figure included quotas for sperm whaling in the coastal waters of several countries where the whale population estimates were very uncertain.²⁷⁵

Many now believe that large-scale commercial whaling could end in 1980.^{275a} Events since the 1979 meeting certainly portend a serious confrontation at the Brighton conference in July 1980. Soon after the end of the 1979 session the Soviet Union unsuccessfully sought to overturn the ban on factory ship whaling,²⁷⁶ and Peru quickly violated its quota by undertaking large-scale whaling operations in September, well in advance of its allotted season.²⁷⁷ Another new member, Spain, also was dissatisfied with the IWC restrictions and filed an objection to its quota of 143 fin whales, which was a substantial reduction from its previous illicit catch. The objection was the first at the IWC since 1974. Under pressure from the United States, Spain soon reversed its position and reluctantly agreed to abide by the quota.²⁷⁸ This new commitment

272. See text accompanying notes 163-64 *supra*.

273. Much to the surprise of most conservationists, however, the *Sierra* was repaired and made ready for further voyages. The ship's future was cut short, however, when it blew up in harbor in February 1980, presumably the work of saboteurs. Marine Action Centre Newsletter, Mar. 1980, at 5.

274. Compare [1978] CHAIRMAN'S REP. THIRTIETH MEETING 8-12 (Int'l Whaling Comm'n) with [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 9-14 (Int'l Whaling Comm'n).

275. [1979] CHAIRMAN'S REP. THIRTY-FIRST MEETING 8, 9 (Int'l Whaling Comm'n). The Western North Pacific was the issue at the 1978 Tokyo meeting, see text accompanying notes 231-36 *supra*, and the South American quotas were allotted in an area where sperm whales are classified as "protection stocks." See *Report of the Scientific Committee*, Doc. IWC/31/4, at 14.

275a. But see text accompanying notes 492-506 *infra*.

276. See Marine Action Centre Newsletter, Oct. 1979, at 1.

277. For a detailed analysis of this very serious violation of the IWC agreement, see Marine Action Centre Newsletter, Mar. 1980, at 13-15.

278. Interview with Remi Parmentier, Greenpeace, France, in Washington, D.C. (April 29, 1980). See also Marine Action Centre Newsletter, April 1980, at 2. During the IWC special meeting on Cetacean Behaviour, Intelligence, and the Ethics of Killing Cetaceans, held in Washington, D.C. April 28-May 1, 1980, it was learned that two Spanish whaling vessels had blown up earlier that week.

is unreliable, however, given the absence of any international observers at Spanish whaling stations.

Still other events point to a growing polarization of the whale issue. Unexplained explosions have hit three whaling vessels in 1980.²⁷⁹ In addition, the Soviet Antarctic whaling fleet has flagrantly violated the new pelagic moratorium that exempted only minke whales. On its way to the Antarctic, the fleet killed 201 sperm whales in the North Pacific. Once in the Antarctic, it shot 906 killer whales (Orcas), causing outrage among whale conservationists.²⁸⁰ Finally, the Japanese dolphin slaughter on Iki Island reached an unprecedented scale in 1980 with the introduction of a processing facility and the large increase in the number of dolphins slaughtered. This action alone has been received by conservationists with painful sorrow as the definitive evidence of man's potential for an insensitive and mechanical annihilation of life. The reaction to these events has been angry and violent.²⁸¹

In contrast to this single-minded exploitative activity is the recent IWC Special Meeting on Cetacean Behaviour, Intelligence, and the Ethics of Killing Cetaceans. Held in Washington, D.C. in April 1980, the meeting included eloquent testimony from many scientists, philosophers, and conservationists. Against the backdrop of technical discussions about the brains of whales and the nature of intelligence came both evidence that scientists are increasingly approaching a "dialogue with dolphins" and a plea for a "nondichotomous system of ethics."²⁸² Whaling interests in attendance questioned the findings and argued

279. See notes 273 & 278 *supra*. The only other violence to appear in whaling protests was a small scuffle that took place at the close of the 1978 London meeting.

280. Marine Action Centre Newsletter, Mar. 1980, at 1; *id.*, Apr. 1980, at 1. The Orca kill may not be a technical violation of the moratorium, since these whales were not specifically listed in the 1979 Schedule amendment that incorporated the pelagic ban. Nevertheless, the kill was unexpected, unregulated, and dangerously high, especially since it was concentrated in only three areas of the Southern Hemisphere. Interview with Bob Brownell, Marine Mammal Commission, in Washington, D.C. (April 1980).

281. The Iki slaughter and the efforts of the American conservationist Dexter Cate to cut the nets and set the dolphins free have been widely reported. See e.g., *American Denies Guilt in Japan Dolphin Case*, N.Y. Times, Apr. 10, 1980, at 8, col. 6. See also Marine Action Centre Newsletter, Mar. 1980, at 12. In the United States, the slaughter was angrily denounced by a group of 50 legislators, including the coauthor of the Packwood-Magnuson amendment, Senator Packwood. 126 CONG. REC. 2880-81 (daily ed. Mar. 24, 1980).

The goal of the kill is to prevent the dolphins from competing with the operations of inshore fishermen. Many scientists challenge this "fisheries management" rationale as wrongly directed, attacking the symptom and not the cause. The symptom (the decrease in the fish catch) is a consequence of overfishing and pollution in the coastal area, and the objective, therefore, should be to control the human fisheries rather than the dolphins.

282. Three papers presented at the meeting were P. Morgane, *The Brains of Whales: The Status of Large Brains and Their Meaning for Man* (unpublished paper in author's possession); H. Jerison, *The Nature of Intelligence* (unpublished paper in author's possession); and M. Bossley, *Monkey, Sparrow, Goldfish and Ant: Towards a Non-Dichotomous System of Ethics* (unpublished paper in author's possession). See *Scientists Move Toward Dialogue with Dolphins*, N.Y. Times, Apr. 22, 1980, at C1, cols. 2-3.

that "ethics is to govern human beings only" and that the controlling ethic is only one of "food production."²⁸³ After years of debate within the Commission, the meeting achieved at least one result: a new way of viewing cetaceans and man's relations to them had become a legitimate topic for thought and debate.

This new perception undoubtedly will be discussed at length in 1980 and will color all negotiations, especially with the conservationist momentum that has been generated by the successes of the 1979 conference. For the first time in the history of the IWC, the industry has been so constrained that only a few specific issues remain to be resolved. At the top of the negotiations list will be a renewed call for a commercial moratorium including partial moratoriums in specific areas such as the North Atlantic.

Despite the changes in the Commission's regulatory processes, Scandinavian whalers in the North Atlantic continue to take whales without the limitations prescribed under the New Management Procedure. Iceland and Norway receive their quotas simply because their catches have remained stable over time, even though catches could remain stable on a declining population.²⁸⁴ Growing opposition to whaling within Denmark, Iceland, and Norway and the inevitability of a challenge at the IWC to the North Atlantic management procedure point to an imminent change in this industry. Also, many conservation groups are directing their efforts at changing this procedure.²⁸⁵

Similarly, pressure for lower quotas or total protection of sperm whales will be intense. Peru and Chile, who have stated their intention to phase out their whaling operations by 1982, take whales with a "protected" status, and Japanese coastal sperm whaling draws on the very unstable Western North Pacific population. The renewal of the demand for a sperm whale moratorium is inevitable. A moratorium may also be declared on the more healthy population of minke whales. They are currently killed with a nonexplosive "cold" harpoon, since a grenade-tipped harpoon is too destructive on these small whales; the "cold" harpoon is criticized as inhumane.

One hitherto minor issue will take on greater significance at the Commission this year: the regulation of small cetaceans. In the past, the IWC has largely restricted itself to the great whales, but recent

283. See N. Saito, *Ethics is to Govern Human Being Only* (unpublished paper in author's possession); A. Macnow, *Whaling: A Food Production Ethic* (unpublished paper in author's possession).

284. For example, catches could remain constant on a declining population if the whales regularly congregate in a small area.

285. This has long been a concern of Greenpeace with its campaigns against Icelandic and Spanish whaling. The Marine Action Centre and Greenpeace have sponsored research on this issue in preparation for the conference. See J. Cooke, *A Case for a North Atlantic Moratorium* (1980) (Marine Action Centre publication).

events have increased the need for the Commission to control the taking of smaller cetaceans.²⁸⁶ Most importantly, the U.N. Conference on the Law of the Sea (UNCLOS) has confirmed the primacy of international regulatory authority over all cetaceans with its acceptance in 1980 of a new text of article 65 of the draft treaty.²⁸⁷ At the same time the renegotiation of the 1946 Whaling Convention seems likely to proceed, so a formal expansion of jurisdiction probably will not occur.²⁸⁸ The recent Soviet kill of Orca whales in the Antarctic emphasizes the need to limit the taking of smaller whales. Similarly, the Japanese slaughter of dolphins at Iki Island points to a need for international protection of all cetaceans.²⁸⁹ The most difficult issue for UNCLOS in 1980 will probably be the Canadian aboriginal take of the small beluga whale and narwhal.²⁹⁰ Canada, ever-concerned with protecting its jurisdiction, may well prove intransigent.

These are the most significant issues facing regulators of commercial whaling. The issue of pirate whaling, especially the activities of Taiwan, will also continue to command attention. This issue recently has been of much concern in the United States as a result of investigations undertaken by Greenpeace in Japan.²⁹¹ Other concerns—notably violations of IWC controls by aboriginal whalers in member states, and an improved observer system to police them²⁹²—will also be discussed. Both the number and scope of the issues before the Commission are now clearly identifiable, increasing the probability that a majority of whale conservation concerns will be resolved.

Strategies to achieve these changes center primarily on the other difficult issue: the bowhead whale. Environmentalists and Eskimos have been antagonists over the bowhead for three years. Yet the inter-

286. The Commission already regulates some small whales, including the bottleneck whale listed in section one of the Schedule. Moreover, the Scientific Committee has established a subcommittee on small cetaceans which regularly assesses developments affecting them.

287. See text accompanying note 409 *supra*.

288. See text accompanying note 389 *supra*.

289. IWC regulation of the direct taking of small cetaceans is distinguishable from the control of incidental kills associated with other fisheries activity. The latter poses a range of issues (such as fishing technology) with which the IWC is not familiar. It also raises the question of whether the IWC or regional fisheries organizations have jurisdiction to control such taking.

290. This aboriginal take has already caused concern in the Scientific Committee. *Report of the Scientific Sub-Committee on Small Cetaceans* 12-14 (1979).

291. See C. Plowden & R. Clark, Whaling in Taiwan 1980 (Mar. 11, 1980) (unpublished paper in author's possession). The investigators were Campbell Plowden and Rebecca Clark of Greenpeace, Seattle, and John Frizell of Greenpeace, San Francisco.

292. For a discussion of the effects of having no observers present to monitor Spanish, Peruvian, and South Korean whaling, see *Preparations for the 32d International Whaling Commission Meeting: Hearings Before the Subcomm. on International Organizations of the House Comm. on Foreign Affairs*, 96th Cong., 2d Sess. 2 (1980) (statement of Craig Van Note).

ests shared by native peoples and environmentalists are at the heart of the environmental movement, and resolution of this destructive issue is a top priority for the immediate future. The recent efforts of both of these groups in challenging the proposed oil and gas leases in the Beaufort Sea²⁹³ provides a basis for mutual accommodation and cooperation, but substantial differences remain. Ultimately, the two groups must agree on a balanced scheme providing for aboriginal subsistence and cultural survival in conjunction with a sound program of whale conservation.²⁹⁴

A second strategy for improving the outcome of the next meeting is to bring still more nonwhaling countries into the Commission. Switzerland has stated its intention to join,²⁹⁵ and many states bordering the Indian Ocean have expressed an interest in consolidating that new regional relationship by following the lead of the Seychelles. In addition, some South Pacific countries motivated by a concern for expanding activities of Japan in the Southern Hemisphere may join the Commission. A diversified membership is desirable if interests other than those of the whaling industry are to exercise a continuing influence within the Commission.

More traditional political activities will continue. Lobbying domestic governments, drawing public attention to the issues, monitoring the activities of "pirate" whaling operations and product trades, and cooperating with sympathetic government officials will lead to another opportunity in 1980 for conservation interests finally to end commercial whaling.

IV

POLITICS OF WHALING

In the creation of international regulations, governmental and nongovernmental representatives interact within a complex political

293. *North Slope Borough v. Andrus*, No. 79-3193 (D.D.C. Jan. 22, 1980), *aff'd in part and rev'd in part*, No. 80-1148 (D.C. Cir. Oct. 9, 1980). The Beaufort Sea area includes the highly sensitive calving grounds of the bowhead whale. Interference with the whales from drilling and shipping activity as well as oil and noise pollution are likely consequences of exploration and drilling in the area. *See generally*, Rosenblatt, *supra* note 158.

The Administrator of the National Oceanic and Atmospheric Administration (NOAA), Mr. Richard Frank, has repeatedly argued for the protection of the Eskimos' cultural needs at the IWC. It is interesting to note that Mr. Frank has joined with the oil industry in opposing the petition of the Eskimos to enjoin industry exploitation.

294. Cooperation between ecologists and Native peoples is important for reasons beyond the whale issue. Energy development and the resource exploitation of the Third World increasingly disrupts Native lands and societies. Moreover, the destruction of traditional cultures that have long lived in direct dependence on the environment is itself an ecological tragedy for a world so removed from nature. The cooperation of these two groups is necessary to combat these trends.

295. Marine Action Centre Newsletter, Nov. 1979, at 2.

framework. The legal structure is only one manifestation of this interaction. It is important, therefore, to understand how the various participants and perspectives give life to the law. From an examination of the actors in whaling regulation and conservation much can be learned about the interaction of economic and environmental interests generally. This understanding will allow constructive proposals to be made that will affect not only the regulation of whaling but also related activities in Antarctica and environmental protection in general.

This section first will summarize the various policies of governmental participants and briefly analyze them in order to appreciate how different interests achieve prominence. Second, it will discuss the operations of nonstate actors, both intergovernmental and nongovernmental, so as to understand their different roles and influence. Finally, more general proposals will be made for a working system of democratic environmental decisionmaking that might respond to the deeper roots of the environmental crisis. With this political understanding, specific legal proposals for the future of whale conservation and, most importantly, Antarctic exploitation will then be made.

A. Participants in Decisionmaking

I. States

Because particular state policies on an issue inevitably differ, they are summarized only briefly in the tables below. Of greater interest are the internal structures that have allowed either economic or environmental objectives to dominate government policies. Therefore, these structures are summarized in some detail following the tables.

The three tables below summarize the policies and interests of IWC members since 1977. Table 4 reveals the voting pattern of members in 1978, 1979, and 1980. Table 5 classifies the various states according to their interests in whaling. Table 6 indicates the interests of a variety of states in the trade in whale products.

TABLE 4: RATING IWC MEMBERS²⁹⁶

1978		1979		1980	
Mexico	+10	France	+16	France	+16
Panama	+10	Panama	+15	Netherlands	+16
France	+ 9	Netherlands	+15	Oman	+16
Netherlands	+ 8	Seychelles	+14	Australia	+15
Argentina	+ 6	Sweden	+12	Seychelles	+15
United States	+ 6	United Kingdom	+12	New Zealand	+15
New Zealand	0	New Zealand	+11	Sweden	+14
United Kingdom	- 1	United States	+10	Mexico	+13
Canada	- 3	Australia	+10	United Kingdom	+12
Australia	- 3	Mexico	+ 7	Switzerland	+10
Brazil	- 4	Argentina	+ 4	United States	+10
South Africa	- 5	Canada	+ 2	Argentina	+9
Iceland	- 6	South Africa	+ 1	Canada	+1
Denmark	- 6	Spain	- 1	Denmark	+1
Norway	- 7	Norway	- 3	South Africa	0
U.S.S.R.	- 9	Iceland	- 4	Norway	-1
Japan	-10	Denmark	- 4	Brazil	-8
		Brazil	- 6	Iceland	-10
		Chile	- 9	Chile	-12
		U.S.S.R.	-12	Peru	-12
		Peru	-13	South Korea	-14
		Korea	-16	Spain	-14
		Japan	-17	Japan	-15
				U.S.S.R.	-15

A conservationist vote scores plus one, a nonconservationist vote scores minus one, and an abstention or absence scores zero. The system is imperfect, however, since a zero is sometimes as damaging to whales as a minus one.

TABLE 5: WHALING INTERESTS OF IWC MEMBERS IN 1979

<u>Pelagic</u>		Democratic Republic of Korea
U.S.S.R.		Tonga
Japan		Indonesia
Norway *		
<u>Coastal</u>		<u>Aboriginal</u>
Brazil		Canada
Iceland		U.S.S.R.
Denmark		U.S.A.
<u>Coastal, joined IWC in 1979</u>		<u>Nonwhaling Members</u>
Chile		Argentina
Peru		Mexico
Republic of Korea		New Zealand
Spain		Panama
		Seychelles
		Sweden
<u>Nonmember Whaling Countries</u>		Australia**
Taiwan		South Africa**
Portugal		France***
Bequia		Netherlands***
People's Republic of China		United Kingdom***

* Not a factory ship pelagic whaler.

** Recently ceased coastal whaling.

*** Major whale products importer.

296. The 1978 ratings are found in *How They Rate*, ECO, July 2, 1978, at 3; the 1979 ratings are found in *How They Rate*, ECO, July 14, 1979, at 2; and the 1980 ratings are found in *How They Rate*, ECO, July 26, 1980, at 2.

TABLE 6: TRADE IN WHALE PRODUCTS (1977)²⁹⁷

	EXPORTS (in tons)				IMPORTS (in tons)			
	Meat	Oil	Sperm Oil	Spermaceti Ambergis	Meat	Oil	Sperm Oil	Spermaceti Ambergis
Australia*			5,192					36
Canada		14						
Denmark		1.3				71.5		
France					3,151**	1,045		
Germany		.2	560		305**	3,341	4,303	
Iceland	3,703***							
Italy		.2			104**	941.8		
Japan		5,826	3,170		36,760		9.9	
S. Korea	1,931	38		6.3	1.2	92		341
Netherlands	632**	10		2	703**	2,134	2,988	10
Norway			2,510			145	5,068	
Sweden				430	6	39		18
U.S.S.R.	13,724	959						
U.K.			1,711				5,600	

* 1976/77.

** Figure includes whale meat, seal meat, and frogs legs.

*** This is a 1976 figure for Icelandic exports to Japan only.

Of primary concern are the whaling nations, many of which are subject to virtually no domestic environmental pressure that might counter their interest in short-term economic exploitation. The Soviet Union, for example, is free from such pressure and continues whaling both for economic²⁹⁸ and political reasons.²⁹⁹ As a result, despite the expectation by many that the Soviets would withdraw from whaling after the quota reductions in 1979, they instead took up their share of the Antarctic minke whale quota, sought to overturn³⁰⁰ and then violated the ban on pelagic sperm whaling, and killed a dangerously high number of killer whales in the Antarctic.

Japan, the other large whaling nation, is also free from domestic environmental constraints. Because Japanese industry has become increasingly involved in many international ventures with serious environmental ramifications, this matter is of great significance. The country's economic dependence on whaling is quite minimal: the industry employs less than 1,000 people, is scarcely profitable, and provides products for which there is a demand but not a necessity.³⁰¹ In whaling, as in Japan's other economic pursuits, however, close cooper-

297. *Briefing Paper: International Trade in Whale Products*, Marine Action Centre Newsletter, Feb. 1979, at 1-4.

298. The U.S.S.R. exports whale meat to Japan and consumes whale oil at home.

299. The U.S.S.R. seems to desire to keep its hand in whaling as long as Japan does, especially in the Antarctic where krill harvesting is of increasing concern. See text accompanying notes 431-40 *infra*.

300. In September, the U.S.S.R. requested a small quota for sperm whales in the Antarctic, but this was rejected in a mail vote of the Commissioners. *Soviet Proposal Lost*, Marine Action Centre Newsletter, Oct. 1979, at 1.

301. Various figures on "indirect" employment have been cited by the Japan Whaling Association, ranging from 50,000 to 300,000. Considering the very small direct employment, these figures are suspect. There is minimal nutritional dependence, especially in light of the protective quotas on the importation of beef and mutton. In fact, Japan exports more fish

ation between economic and governmental interests is very apparent. It is thus the structure of decisionmaking, rather than the industry's contribution to the country's economy, that explains Japan's resistance to the massive international pressure that has been brought to bear on it.

The close links between the whaling industry and government are evident in Japan's choice of its representative to the IWC. Its representative from 1949 to 1975 was Iwao Fujita, who headed the new Japan Joint Whaling Company when it was formed in 1967 and previously had chaired Japan's Fisheries Agency. Mr. Fujita also was president of Nippon Kyoda Hogeï K.K., the fisheries company largely owned by Taiyo Fisheries, and Chairman of the Japan Whaling Association.

In addition to the close relationship between senior government and corporate whaling interests, Japan's prominence in world fisheries since World War II has given the industry enormous power in influencing government decisions. This power is augmented by the influence of the All Japan Seaman's Union, which views any reduction in quotas not as a challenge to industry mismanagement but only as a threat to domestic employment posed by foreign conservationists.³⁰²

In addition to this strongly economic foundation for government decisionmaking, the complete lack of domestic opposition to the industry contributes to the government's failure to be responsive to environmental concerns. The pressure thus is entirely external and naturally engenders a national defensiveness. Within Japan, there are many environmental causes—Minimata mercury poisoning and the opposition to the new Narita Airport are two notable examples—but they are essentially local. There is an almost total lack of concern for international environmental problems, even those created by Japanese economic activity. Efforts by foreign groups to organize a domestic opposition to whaling have hitherto foundered for a variety of reasons, including the unwillingness of such groups to commit substantial resources to the task, their noncooperative approach, lack of domestic interest, governmental opposition, and the difficulty of overcoming the language and cultural barriers.

protein than it consumes in whale meat. Some cultural attachment to it does undoubtedly exist, although much that is consumed is hidden as cheap filler in meat patties. *See* WHALE MANUAL '78, *supra* note 27, at 46-61.

There is some direct dependence by coastal whaling towns on the employment provided by their local whaling operations. In addition, because the Japanese have been excluded from many of their traditional fisheries by the creation of 200-mile "exclusive economic zones," they are reluctant to withdraw from other more accessible fisheries. Even with the industry's grave concern over access to nondomestic food sources, however, the contribution of whale meat is very small, since the fisheries market has become oversupplied in recent years.

302. *See* Japan Whaling Association, *The Whaling Question: Questions and Answers* 12 (June 22, 1978) (materials distributed at press conference in London).

interest, governmental opposition, and the difficulty of overcoming the language and cultural barriers.

To date, therefore, only opposition by foreign conservationists has acted to counteract the influence of Japanese economic interests. This outside pressure contributed to the Japanese government's resistance to the industry's request that an objection be filed protesting the Canberra quota cuts.³⁰³ Such pressure continues to restrict the government's alternatives and offsets the industry threat to withdraw from the Commission. Without any domestic support of such criticism, however, the chances of changing Japanese policy are limited.³⁰⁴

A second group of states lacking opposition to exploitation by internal environmentalists includes those that until 1979 operated outside the IWC: South Korea, Chile, Peru, and Spain. Although whaling activities by these countries are limited to coastal operations, control of these operations is important, since almost all whale populations outside the Antarctic are accessible to coastal whalers as they pass by on their annual migrations. In each of these countries, the small coastal whaling industries have been closely linked to Japanese economic interests, usually Taiyo Fisheries Company. The industries have been operated with little interest or involvement from the central governments and no domestic environmental opposition. So long as they provided employment and economic income, there was little incentive for governments to interfere. With no domestic opposition in these countries, it was only external pressures, in the form of threats to invoke the Pelly amendment,³⁰⁵ and fear of a moratorium being passed, that finally brought them into the commission *en masse*.

The Scandinavian states of Norway, Iceland, and Denmark comprise the third group of whaling nations. Domestic opposition to whaling policies is only beginning in all three countries, but their more open structures of decisionmaking have allowed internal debate to grow in response to the pressures of foreign conservationists. Their whaling ac-

303. The Tokyo newspaper *Yomiuri* reported on the governmental policy: "If Japan is to take a strong step, it will be dealt all-out attacks by various countries, and restrictions on its fish catch within the 200-nautical-mile zones will be strengthened . . . [It will also] spur criticism of trade with Japan." *Yomiuri*, June 30, 1977, at 9. The absence of a domestic conservation lobby means that there is pressure on the whaling industry only in extraordinary circumstances, and then only to restrain exceptional behavior.

304. Because Japan is the bulwark of the Western presence in Asia, the stability of the Japanese economy has enormous military significance. For this reason alone, the ecological transition will be vehemently resisted in Japan so long as the prevailing economic paradigm is seen as the only route into the future.

305. The Marine Mammal Commission found that Peru, Chile, and South Korea had each infringed international regulations and thus qualified for certification under the Pelly amendment. See U.S. DEPT OF COMMERCE, ANN. REP. MARINE MAMMAL COMM'N 79-81 (1980).

tivities are substantial³⁰⁶ and have been the objects of increasing outside interference. Since 1978, the European offices of Greenpeace have undertaken a well-publicized campaign of nonviolent interference with Icelandic catcher boats outside Icelandic territorial waters. In 1978, the General Assembly of the Nature Conservancy Council of Iceland began investigations into Icelandic whaling because of "the danger of extinction of whale species, and the scarcity of whales in the oceans, and because of the criticism of Icelandic whaling."³⁰⁷ This interest has moderated Icelandic policies on many issues. Similarly, the newspaper campaigns undertaken in Norway by American organizations have brought attention to the whale issue and supported the Norwegian Conservation Society in its call for a halt to Norwegian whaling. This protest was given a substantial boost by the report at the 1979 IWC meeting indicating that Norwegian minke whaling was carried on without explosive harpoons and by the revelation that Norway had supplied men and equipment to pirate whaling operations. A similar newspaper campaign in Denmark is credited by conservationists with causing more moderate policies to be adopted there in 1979.³⁰⁸ In the future, growing domestic opposition as well as influence from the conservationist Swedish delegation will put pressure on the hitherto unchallenged policies of these three governments.

The handling of the whaling issue by a fourth group of states, all with strong parliamentary democratic systems of government, demonstrates both the possibilities and limitations of that system in promoting environmental interests. These states—Australia, New Zealand, Canada, and the United Kingdom—have a variety of economic interests, but each also has a vociferous environmental lobby. Australia's dramatic policy reversal in 1978³⁰⁹ reveals the great potential power of environmental pressure. Similarly, New Zealand, a supporter of the IWC's New Management Procedure, responded to domestic criticism of this procedure by passing the Marine Mammals Protection Act in 1978 and by repudiating the Commission's management approach in 1979.³¹⁰

Similar reversals of policy have not been achieved within either

306. Norway operates a pelagic operation (but with combined catcher factory ships) killing approximately 1800 whales annually. Iceland's one coastal whaling station kills a sizeable number of fin whales, exporting increasing amounts of whale meat to Japan in recent years (from 305 tons in 1971 to 3,703 tons in 1976). Japan Marine Fisheries Association, Imports of Marine Products by Country, Table 7 (Dec. 1976).

307. Marine Action Centre Newsletter, Feb. 1979, at 2.

308. Foreign-sponsored newspaper advertisements may, however, engender nationalistic sentiment against "imperialistic" interference.

309. See text accompanying notes 225-27 *supra*.

310. Marine Mammals Protection Act, No. 80 (Stat. N.Z. 1978). New Zealand has active offices of Project Jonah, Friends of the Earth, and Greenpeace. These offices have been especially vociferous on the issue of Antarctic resource exploitation and were credited by

Canada or the United Kingdom. The Canadian government phased out domestic commercial whaling in 1972, and Canada imports almost no whale products. Nevertheless, Canada has continued to take an uncompromising "managerial" stance at the IWC. In fact, despite its avowed environmentalism at the recent Law of the Sea Conference,³¹¹ the Canadian government has pursued a policy motivated almost solely by coastal expansionism rooted in its interest in marine resource exploitation. In recent years, this attitude has hardened into a jurisdictional protectionism that has prompted the government to oppose any strong international conservation measures the need for which cannot be readily demonstrated with hard data. To safeguard its freedom of marine exploitation in its coastal areas, the government has weakened the authority of international conservation bodies to take strong protective measures.³¹² With growing criticism of its annual harvest of another marine mammal, the harp seal, and evidence of the mismanagement of its own aboriginal whaling,³¹³ Canadian policy might harden even further in the future.

Canadian policy demonstrates the inaccessibility of government to private interest groups on matters where major policies are at stake. Without the flexible legislative structure and diverse access to power found, for example, in the United States, those who have sought to influence Canadian policy have been forced either to seek out sympathetic bureaucrats or to elevate the issue to the ministerial or party level. Attempts to do either have been unsuccessful. Similarly, the long and continuing resistance of the United Kingdom to banning the importation of sperm whale oil has withstood the pressure of a strenuous lobby by the Friends of the Earth. As with other issues,³¹⁴ the relatively closed and hierarchical structure of that government's policymaking process is more responsive to the economic pressures of industry than to the pressure to protect less tangible interests asserted by the environmental lobby.³¹⁵

New Zealand Foreign Minister B.E. Talboys with the government's change of policy on whale conservation. Statements of B. Talboys (May 29, Aug. 14, 1979).

311. See M'Gonigle & Zacher, *Canadian Foreign Policy and the Control of Marine Pollution*, in *CANADIAN FOREIGN POLICY AND THE LAW OF THE SEA* 100-51 (1977).

312. Canada has, for similar reasons, also filed reservations to its acceptance of the CITES appendices.

313. See *Report of the Scientific Committee*, Doc. IWC/31/4, at 29-31; *Report of the Sub-Committee on Small Cetaceans*, IWC/31/4, at 19-23; *Report of the Sub-Committee on Protected Species and Aboriginal Whaling*, IWC/31/4, Annex H.

314. For a detailed analysis of this phenomenon in relation to British policy on oil pollution, see M'GONIGLE & ZACHER, *supra* note 69.

315. Despite an admission by the British Department of Industry in late 1979 that "substitutes exist for all present uses of sperm whale oil," Friends of the Earth, London reported a continuing failure of the government to act on its proposed importation ban. See *Sperm Oil Obsolete—Official*, HARPOON, No. 4, at 1; *Tory Go Slow on Whale Product Ban*, HARPOON, Feb. 1980, at 1.

The history of the whale conservation issue in the United States stands in stark contrast to the haphazard and uneven treatment whales have received in the countries discussed above. The American whale conservation movement began in the late 1960's. A flurry of legislative activity in Washington ended whaling by the United States, banned the importation of whale products, and initiated a wide range of changes at the international level.³¹⁶ In particular, the passage of the Marine Mammal Protection Act³¹⁷ in 1972 broke new ground by implementing an ecosystem approach in place of the single species concept of maximum sustainable yield, thus setting the stage for much of the debate of the last decade. That legislation also created a small but invaluable bureaucracy, the Marine Mammal Commission, to safeguard the interests of these creatures. Finally, the Act directed the Secretary of Commerce to "initiate the amendment of any existing treaty for the protection of . . . marine mammals . . . to make such treaty consistent with the purposes of this act."³¹⁸ In 1974, the United States proposed such an amendment to the IWC, and the process of revising the 1946 Whaling Convention was begun.

During this period, the United States also brought to fruition a decade of activity by the International Union for the Conservation of Nature (IUCN). In 1963, the IUCN's General Assembly had begun to draft a preliminary treaty aimed at controlling international trade in wildlife. It was only with the active cooperation of the United States however, that a conference on this matter was held. The result of this conference, held in February 1973 in Washington, was the Convention on International Trade in Endangered Species (CITES).³¹⁹ The policies established at CITES were immediately implemented in the United States through enactment of the Endangered Species Act of 1973.³²⁰

This intensive legislative activity in the United States presaged much of the content of the IWC agenda for the entire decade of the seventies; the moves for a moratorium and adoption of the New Management Procedure, for the enforcement of conservation regulations and restrictions on trade in whale products, and for revising the 1946

316. See text accompanying note 119 *supra*. For the source of much international activity, see S.J. RES. 115, 92d Cong., 1st Sess. (1971); H. CON. RES. 387, 92d Cong., 1st Sess. (1971).

317. 16 U.S.C. §§ 1361-1407 (1976). This act is discussed in detail in Coggins, *Legal Protection for Marine Mammals: An Overview of Innovative Resource Conservation Legislation*, 6 ENV'T'L L. 1 (1975). Coggins discusses public interest input and international ramifications. *Id.* at 46-59.

318. 16 U.S.C. § 1378(a)(4) (1976).

319. CITES, *supra* note 32.

320. Pub. L. No. 93-205, 87 Stat. 884 (1973) (codified in scattered sections of 7, 16 U.S.C.). This Act and others are considered in some detail in Palmer, *Endangered Species Protection: A History of Congressional Action*, 4 ENV'T'L AFF. 255 (1975).

Whaling Convention itself all were initiated within this country. No other nation has had as great an impact at the Commission in recent years. While the economic power of the United States has given it great leverage in these matters, the stands it has taken can be attributed in large part to the degree of access the government has provided to nongovernmental actors.

A specific example of governmental accessibility within the United States and its impact on international events is the recent amendment to the Fisheries Conservation and Management Act,³²¹ which significantly influenced negotiations at the 1979 meeting. Initiated by Senators Packwood and Magnuson, two politicians with close ties to the environmental community, the amendment requires that nations found to be acting against an international fisheries conservation agreement be excluded from fishing within the American 200-mile exclusive economic zone. Even on issues with major conflicting interests, such as bowhead whale conservation or Antarctic exploitation, the U.S. government is the most open to debate among a multitude of viewpoints.³²²

The last group of states includes those that, for a variety of reasons, are free from economic pressures that might prevent them from taking conservationist positions. These countries have provided the numerical base of support for many conservation initiatives at the Commission. This group of states can be divided into three subgroups: the Seychelles; Mexico, Argentina and Panama; and the Netherlands and France.

The Seychelles, a new member of the IWC in 1979, has taken an active environmentalist position at the IWC and on other issues.³²³ The country has much to gain by maintaining a rich sea life in its archipelagic ocean area, but it is nevertheless unusual for a Third World country to advocate environmental values as forcefully as this country has done in international meetings. Although the Seychelles has been aided at the IWC by the conservationist Threshold Foundation, its stance can be attributed primarily to internal factors opposite to those operating in Third World countries such as Peru and Chile, where the only unchallenged value is economic.

321. Pub. L. No. 96-61, 93 Stat. 407 (1979), amending 16 U.S.C. § 1821e (1976). The Act regulates fishing within the U.S. 200-mile zone. Japan alone takes fish worth an estimated \$225 million from this zone.

322. The openness of the U.S. Government also allows special economic interests to affect legislation directed at them. This is to be expected for a society based upon such powerful economic forces. The operation of the American system with regard to another environmental issue, oil pollution, is discussed in detail in M'GONIGLE & ZACHER, *supra* note 69.

323. For a discussion of other initiatives taken by the Seychelles, see IUCN Bulletin, Nov. 1979, at 99.

Mexico also has an incentive to protect its ocean areas: the contribution to its valuable tourist industry made by the annual grey whale migration to Scamman's Lagoon off the coast of Baja. Mexico has argued against higher quotas at the IWC, but this stance has been the extent of its participation. It has neglected to attend the Scientific Committee meetings or submit specific proposals. Yet the low level of interest in the whaling issue exhibited by the governments of Mexico, Panama, and Argentina has enabled the Commissioners from these countries to exercise personal discretion and take strong stands at the IWC. Panama has been so unconcerned that it allowed a nonnational, Mr. Fortom-Gouin, to represent it at two meetings. It was only his personal interest that resulted in forceful positions being taken by Panama. When Japan applied diplomatic pressure, however, Fortom-Gouin was dismissed.³²⁴ Panama sent no representative to the Tokyo meeting in 1978 and will almost certainly withdraw from the Commission before the 1980 annual meeting.

The governments of Mexico and Argentina also exhibit little interest. Neither nation sent a Commissioner to the meetings in Japan; instead, they appointed personnel from their embassies in Japan to act as their representatives. Nor has either of them sent a representative to any Scientific Committee meetings during the last few years. The effects of this lack of interest on policymaking are quite clear for Argentina. In London, Argentine policy has been strongly conservationist, but in Tokyo, where Japanese relations were of more direct concern, the embassy representative voted solidly with the industry interests.

The policies of France and the Netherlands can also be understood as emanating from limited government interest in the whale issue. France has been a strong advocate of conservation only in the Commission debates, and only then because of its Commissioner's personal interest. At home, France has continued to import substantial quantities of whale products, including a sizeable amount from non-IWC countries.³²⁵ Similarly, the Netherlands has, since rejoining the Commission in 1977, maintained an active conservationist stance at the meetings while continuing to import whale products at home. After years of active whaling, its new policy followed a decision to implement the recommendations of the Stockholm Conference,³²⁶ but the government had, by late 1979, still failed to implement its promised

324. See text accompanying notes 192-94 *supra*.

325. France imported 1,037 tons of whale products from non-IWC countries in 1977. Marine Action Centre Newsletter, Nov. 1979, at 19. This lack of coordination between the policies of the various ministries, here the Foreign Affairs and Industry Ministries, is referred to in France as *le mal français*.

326. Interview with F.H.J. Van der Assen, Dutch Commissioner to the IWC, in London (July 25, 1979). Van der Assen attributes Dutch policy to its participation in the IUCN and, recently, to the growing whale conservation movement within the country.

ban on whale product imports. With a growing whale conservation lobby in both countries, their policies may become more consistent.

This brief review of government policies demonstrates how precarious is the foundation for international conservation measures. Countervailing economic interests—no matter how small—tend to dominate environmental concerns. Countries that espouse conservation abroad undertake minimal change at home when even slight national economic interests are directly affected. Even in the most democratic countries, the nature of the government process continues to favor economic interests and impede adequate consideration of environmental values. As a result, the fate of whales is left to a handful of states that are free from economic interest in whaling and thus support conservation. To seek changes only at the international level is not enough, since such changes are a product of the interactions between individual nations. Political changes at the national level must command attention as well if future international decisions with economic consequences are adequately to reflect concern for our shared and limited biosphere. This Perspective will propose national political changes in part IV, B below.

2. *Non-State Actors*

In addition to the member states, nongovernmental actors have become increasingly important participants in the regulatory process at the IWC in recent years. These actors are of two general types: intergovernmental organizations (IGO's) and nongovernmental organizations (NGO's). Before they became active, whaling was, in effect, unregulated. With the growth of the whale protection movement, regulation has increased but is still far from adequate. Because the IWC operates on the basis of scientific advice, however inadequate that may be in practice, states are hesitant to object to its decisions, and the exploitation stops at higher population levels than just a few years ago. Drawing on the work of concerned scientists, nonstate actors have not ended whaling but have at least ensured that after the industry is gone some whales will remain. This guarantee is the tangible achievement of such transnational³²⁷ organizations.

The working of these groups, therefore, is of central importance to the operation of international law in this area. Their activities include

327. "Transnational" relations are those that operate across state boundaries. Multinational corporations are the most well known transnational actors, but environmental organizations act in this way as well whenever they coordinate their private activities in various countries. This is an important phenomenon that has been well-recognized in the field of international politics, but its potential for radically restructuring our conceptions of "international" law has not yet been realized. On transnational relations, see J. NYE & R. KEOHANE, *POWER AND INTERDEPENDENCE* (1977); J. NYE & R. KEOHANE, *TRANSNATIONAL RELATIONS AND WORLD POLITICS* (1971).

developing relevant information and generating political pressure at the IWC and on member governments. The IGO's have been particularly concerned with the first of these functions.

Since the IWC adopted the New Management Procedure of "scientific" management of whaling in 1974, most governments have hesitated to deviate from its decisions. To promote conservation, therefore, one must join the scientific debate. Two intergovernmental organizations, the U.N. Food and Agriculture Organization (FAO) and the IUCN, have successfully entered the scientific discussions.³²⁸

The FAO has always had a special relationship with the IWC, and it was even argued in 1946 that the Commission should affiliate with the emerging United Nations system by being subsumed within the FAO.³²⁹ Failing that, the FAO has regularly sent an adviser-observer to the Commission's meetings who, although accepted on the same terms as one of the many experts, was often critical of the Commission. Peter Bock described the FAO role in the 1960's as being "a cross between that of the scientists and that of the conservation pressure groups."³³⁰ This dual characterization is still appropriate to the extent that, although FAO has been very critical of the IWC management policies, it has been afforded the degree of access to that body granted only to recognized members of the organizational elite.³³¹

The important role of the FAO first became apparent when its scientist, Dr. Sidney Holt, was appointed to the Committee of Three in 1960.³³² Throughout the 1960's, however, the IWC repeatedly disregarded scientific advice, and its relations with FAO deteriorated. In more recent times, the FAO has become extremely active both in the Scientific Committee and in its own right. The FAO adviser in the Scientific Committee has been a forceful advocate of careful use of scientific data and of caution in exploitation.

Outside of the IWC, the FAO in 1973 created an Advisory Committee on Marine Mammal Research (ACMMR). In conjunction with the United Nations Environment Programme (UNEP), the ACMMR sponsored the 1976 Scientific Consultation on Marine Mammals in Bergen, Norway.³³³ This meeting, held outside the authority of the IWC, produced the most thorough scientific review of the conditions of

328. As an organization the IUCN is *sui generis*. It is not fully an international organization in the traditional sense of a U.N. agency or multilateral commission, nor is it an NGO, since it is intergovernmental as well as having private members. As it has been treated as an IGO at the IWC since 1978, this Perspective shall do so here.

329. P. Bock, *supra* note 40, at 128-30. See text accompanying notes 50-52 *supra*.

330. P. Bock, *supra* note 40, at 205.

331. Two of the world's most respected fisheries scientists, Dr. John Gulland and Dr. Sidney Holt, have represented the FAO at the IWC.

332. See text accompanying note 88 *supra*.

333. See text accompanying note 145 *supra*.

cetaceans and other marine mammals yet undertaken. The review was extremely critical of contemporary management procedures.

The FAO's role both outside and within the Commission have been important for the development of a base of information for whale conservation. In recent years, the FAO has been joined by the IUCN in this task. As one of the world's most respected scientific conservation bodies, the IUCN is well suited for this role. Indeed, its primary goal has been to provide scientific advice on conservation issues to national governments and international agencies.³³⁴ The IUCN's representative at the Scientific Committee has worked closely with the FAO's representative to identify the weaknesses, errors, and trends in the data on whale populations. It was this work that, in 1978, was greatly responsible for the decisions to end sei whaling in the Southern Hemisphere and to reduce the quotas on female sperm whales.³³⁵ It is a testament to this work that shortly thereafter the Japanese delegation challenged the right of the IUCN to be present as a scientific participant in the Scientific Committee.³³⁶

The scientific contributions of the FAO and IUCN have been central to the work of the Scientific Committee, especially since it began utilizing the New Management Procedure. On the other hand, NGO's were not involved in the production of scientific advice until much later. The first NGO to actively produce scientific advice was the Washington-based Whale Protection Fund. Prior to the 1978 IWC meeting, that group organized and funded a major research product on sperm whales³³⁷ which bore fruit at the IWC.³³⁸ Before that time, no NGO, including those that had attended the Scientific Committee as observers—Friends of the Earth, Greenpeace, Project Jonah, and the Whale Center—had been involved in such scientific research. Friends of the Earth, for example, had done much work assembling, disseminating, and criticizing existing scientific information, and in collecting data on exploitation and trade,³³⁹ but it had not participated in the actual generation of scientific information for consideration at the Commission. Similarly, although the Greenpeace representative at the

334. The IUCN, in conjunction with the London-based International Institute for Environment and Development, has undertaken an extensive evaluation of the biological, economic, and legal implications of krill harvesting in the Antarctic Ocean. For the results of this investigation, see B. MITCHELL & R. SANDBROOK, *THE MANAGEMENT OF THE SOUTHERN OCEAN* 60-126 (1980). See also The Southern Ocean Convention Workshop on Management of Antarctic Marine Living Organisms, Report and Recommendations (April 2, 1980).

335. See text accompanying note 216 *supra*.

336. ECO, June 30, 1978, at 2, col. 3.

337. WHALE PROTECTION FUND WHALE REPORT, Fall 1978, at 1, 4.

338. See text accompanying note 196 *supra*.

339. The *Whale Manual*, first produced by FOE in 1972, has been the touchstone of the whale conservation movement worldwide.

Scientific Committee had undertaken much whale research,³⁴⁰ Greenpeace itself never sought to generate such information.³⁴¹ In 1980, however, the Whale Center, through its research on bowhead whales, made an important contribution to the debate on a crucial issue within the United States, although the work has not yet had an impact at the IWC.³⁴² In addition, a number of NGO's helped to organize and finance the special meeting on Cetacean Behavior and Intelligence, which could mark an important turning point for the Commission.³⁴³

The tardiness of these groups in engaging in research is not surprising. First, with their limited funds, lack of data, and perspective on whales that differed from that of the IWC, these organizations were neither able nor willing to undertake the type of research useful to the IWC. Second, the IWC procedures have discouraged NGO research by not allowing NGO observers to participate in the debate. As their scientific criticisms have usually proven prescient, their nonparticipation has long been a loss to the Commission.³⁴⁴

With the political importance of scientific information for the Commission, the NGO's finally became more involved in this aspect of conservation. In addition, at the 1979 meeting, these groups provided

340. Greenpeace representative Dr. Paul Spong works through the Pacific Killer Whale Foundation on behavioral and communication studies with killer whales (*Orcinus orca*) at his Orca Lab research center near Alert Bay, British Columbia, Canada. This work has not been of interest to the Commission, but with the Foundation's slowly evolving concern with "aesthetic nonconsumptive" uses and "the ethics of killing cetaceans," it will command growing attention.

341. Conservationists long have argued that the estimates of sperm whale populations have been grossly inflated, and they have predicted the decline which seems to be taking place. Since 1975 Greenpeace has been sending vessels into the North Pacific to track the whaling fleets, and has reported an almost total absence of large cetacean life although it has never organized its expeditions so as to provide the Commission with a useful scientific sightings study.

342. The Oakland, California-based Whale Center has, through its research director Ronn Storro Patterson, recently undertaken a study of the feasibility of substituting gray whales for bowhead in the Inupiat hunt. *The Hunt of Gray Whales by Alaskan Eskimos: A Preliminary Review* (1980) (Whale Center Special publication).

343. The cosponsors include the Threshold Foundation, the Institute for Dolphin Research, the Animal Welfare Institute, and the International Fund for Animal Welfare.

In a related development, the Washington-based Center for Law and Social Policy sponsored a scientific workshop on the proposed Antarctic marine resources treaty. See SOUTHERN OCEAN CONVENTION WORKSHOP ON MANAGEMENT OF ANTARCTIC MARINE LIVING ORGANISMS (April 2, 1980). For a more detailed discussion of this issue, see part V, B *infra*.

344. The gap between "credible" scientists and conservationists parallels an issue discussed under the rubric of "philosophy of science": the gap between what is analytically conceived to be "true" (by the application of "scientific" models) and what is felt to be true (by the non-"scientific" application of common sense and experience). To reconcile these conflicting perspectives is one of the great challenges confronting contemporary technological society. For a short discussion of this issue, see Blackburn, *Sensuous-Intellectual Complementarity in Science: Counter-Cultural Epistemology Has Something of Value to Contribute to the Science of Complex Systems*, 172 SCIENCE 1003 (1971).

the IWC with much valuable nonscientific information on pirate whaling. As long as the Japanese delegation was not confronted with evidence of complicity by Japanese whaling interests, it was able to escape accountability. No government had bothered to investigate the possibility of Japanese complicity, but three NGO's, the People's Trust for Endangered Species, Greenpeace, and the Threshold Foundation, did.³⁴⁵ They presented evidence to the IWC in 1979 that was detailed and irrefutable and forced the issue of outlaw whaling to the top of the IWC agenda. When combined with the independent ability of these organizations to bring direct pressure on the whaling industry, this information-generating role is very important.

The second area of activity for nonstate organizations at the IWC has been the exercise of direct political pressure at the Commission itself. Rather than generating scientific or other information for consideration within the Commission, the IGO's often conduct political activities outside of the IWC and thus exert pressure on the Commission indirectly. UNEP, with its continuing calls for a moratorium on commercial whaling, has been the leading IGO in this regard. Although the total commercial moratorium urged by the 1972 Stockholm Conference had always been rejected, it was accepted with continuing pressure from the United States in the modified form of selective moratoria, the New Management Procedure. Even after this procedure was adopted, the proposal for a total moratorium continued to haunt the Commission. The issue's absence from the agenda in 1976 was "deplored" by the UNEP delegate.³⁴⁶ It was present on the agenda again in 1978. In 1979, the pelagic moratorium was passed.

In addition to calling for an IWC moratorium on whaling, UNEP exercises its own authority to protect whales and maintains a lever against the Commission both independently and through its cooperation with FAO. The 1976 Bergen consultation was a joint UNEP/FAO initiative, and UNEP contributed \$500,000 to ACMMR.³⁴⁷ At the thirtieth meeting of the IWC, the UNEP representative informed the body

345. The U.S. Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs, in testimony before the Senate Committee on Commerce, acknowledged the "major role played by the conservation community in this country and around the world in developing information on these non-IWC activities and in continuing to press us to pursue this issue." *Hearings on Whaling Operations Conducted Outside the Control of the International Whaling Commission Before the Senate Comm. on Commerce, Science, and Transportation*, 96th Cong., 1st Sess. 6 (1979). Senator Packwood, commenting on the brief by the People's Trust, said that he had "seldom seen a more thorough documenting of a case. . . . It is the kind of absolutely vital information that buttresses the case." *Id.* at 65-66.

346. Statement by K. Curry-Lindahl, UNEP, before the Twenty-Eighth Meeting of the IWC (June 21, 1976).

347. See text accompanying note 333 *supra*. Contributors other than FAO and UNEP included the IUCN, the World Wildlife Fund, and several governments.

that UNEP was "in the process of formulating a plan of action for the follow-up steps to the FAO-UNEP" meeting.³⁴⁸ In June and December 1979, meetings of experts were held to discuss plans, including the possibility of holding a worldwide inquiry on marine mammals. The results of these meetings and many related recommendations were presented to UNEP's Governing Council in May 1980. Together, the FAO and UNEP are asserting their interest and incipient jurisdiction over what traditionally has been viewed as IWC terrain.

The IUCN also has created a new pressure on the Commission through the Convention on the International Trade in Endangered Species.³⁴⁹ The convention, which entered into force on July 1, 1975, lists endangered species in three appendices according to the severity of endangerment. Through a series of import and export certificates and annual reports from members, CITES regulates trade in these species. Appendix I includes the very highly endangered species, trade in which is prohibited for commercial purposes. Appendix II lists threatened species which require trade controls, while appendix III includes those species listed by a member nation that needs cooperation in controlling the trade in its jurisdiction. Trade is defined to include "introduction from the sea"³⁵⁰ and thus includes the hunting and removal of marine mammals. The pressure exerted by this convention on the IWC has its source in CITES' independent power to list endangered species. CITES could conflict with the IWC, especially if the latter were recalcitrant in ending exploitation of a threatened species. Currently, IWC-protected species are listed in appendix I, and all cetaceans not included in that list are listed in appendix II.³⁵¹ CITES and the IWC have arrived at an arrangement of reciprocal representation and advice, and amendments to the two appendices will reflect consultation with "the Scientific Committee of the IWC *together with other sources*."³⁵²

A second role played by CITES in the IWC has been its assistance in the enforcement of the Commission's regulations for the conservation of whales. Although IWC members can circumvent quota restrictions by importing whale products,³⁵³ parties to CITES are prohibited

348. Statement by S. Kurabawa, UNEP, before the Thirtieth Meeting of the IWC (June 26, 1978).

349. CITES, *supra* note 32. The CITES secretariat is officially distinct from that of the IUCN, since CITES is a nonpolitical administrative secretariat.

350. *Id.* art. I(e).

351. All blue, humpback, bowhead, right, and gray whales, and most populations of fin and sei whales, are listed in appendix I. It was decided at the second meeting of the CITES parties, held in March 1979 in Costa Rica, to list all cetaceans, whether endangered or not, in appendix II because they are indistinguishable in trade from other endangered cetaceans. Their listing thus greatly facilitates trade controls.

352. Doc. IWC/SPEC 77/6, App. 1 (emphasis added).

353. IWC restrictions are only nonbinding resolutions.

from doing so after the IWC quota is included in a CITES appendix. Predictably, many IWC countries have not ratified the new convention—for example, Iceland³⁵⁴—while others have entered reservations to some of its listings—notably Australia, Canada, and the Soviet Union. CITES actively fosters cooperation with NGO's to monitor wildlife trade; similar cooperation by the IWC could be a boon to the Commission's enforcement of its whaling quotas.

The NGO's are also active in applying political pressure at the IWC. The IGO's and the NGO's both present policy papers to the opening plenary session of each annual meeting, although the impact of these papers, which are frequently general criticisms of the Commission, is rarely significant. The presence of the NGO's, however, has served to demonstrate the concern that exists in the world at large for the secret deliberations of the small, essentially unaccountable IWC. This concern is evident in the growing number of NGO's now attending the Commission's meetings. In the 1960's, few such NGO's existed. The World Wildlife Fund and occasionally some humane societies were the only observers. The following table shows the growth in environmental NGO representation.

TABLE 7: ENVIRONMENTAL NGO REPRESENTATION AT THE IWC³⁵⁵

1964	1965	1966	1967	1968	1969	1970	1971	1972
1	4	3	4	3	3	3	4	3
1973	1974	1975	1976	1977	1978	1979	1980	
4	7	8	7	8	15	21	40	

The NGO's have two basic functions at IWC meetings. First, they act as a liasion with the media, particularly the local media where the meetings are held. Although the Commission's rules for the most part prohibit such outside communication,³⁵⁶ the Commission prudently has chosen not to enforce these rules. Continuous press coverage can have a salutary effect within the meetings itself by making delegates continuously aware of the concern of outsiders with their decisions. Outside pressure is further heightened by the continuous demonstrations that inevitably accompany a Commission meeting. Critical newspaper editorials combine with popular protests to illuminate the narrow economic considerations lying not far beneath a superficially scientific, rational discussion. Nevertheless, in the face of the deeply ingrained ethic of exploitation that underlies the negotiations, the challenges by outsiders are more often confusing and frustrating than illuminating.

354. As of August 1980, there were 60 members of CITES. IWC members not parties to CITES were Argentina, Iceland, Mexico, the Netherlands, New Zealand, Oman, South Korea, and Spain.

355. Annual IWC Chairman's Reports, 1964-1979.

356. See Circular Communication, Admission of Observers and the Press to Commission meetings (July 18, 1977).

The second activity of the NGO's at IWC meetings is lobbying the delegates. In general, the major targets of such lobbying have been the home delegations of the NGO representatives—the United States, the United Kingdom, Canada, and Australia; a wider lobbying role has not been well developed. Moreover, because many delegations are under instruction from home, lobbying at the meeting may come too late. Nevertheless, the lobbying role is important and rapidly growing. The Commission negotiations involve complex compromises, some of which are affected by lobbyists, especially where delegations are required to justify their actions and know that their conduct and voting positions will be reported at home. Smaller delegations are frequently without detailed instructions and experience; thus they are often more open to suggestions and interested to learn about the issues. In this regard, *ECO* has performed a useful function in informing delegates daily about the progress of events and their implications. With the large number of NGO participants and the coordination provided by the Marine Action Centre, lobbying was particularly effective in 1979.

In addition to providing information to and putting pressure on the Commission, a third general strategy for nongovernmental organizations is to exert direct pressure on national governments. The organization of this third strategy may transcend national boundaries. Even the essentially national focus of activity in the United States has transnational repercussions.³⁵⁷

This transnational activity may take very direct forms, most dramatically the American economic boycott and the high seas interventions in the whaling operations. The economic boycott was the first and remains perhaps the most intense demonstration of nongovernmental power on the whaling issue. When Japan and the Soviet Union filed objections to the Commission's 1973 quota reductions, they had underestimated the influence of the conservation movement in the United States, and many of the leading American environmental organizations announced an immediate boycott of all Japanese and Russian products.³⁵⁸ With the large membership represented by these organizations and the extensive trade with Japan, the boycott could quite likely have had a real economic impact. Nevertheless, there has been much criticism of the strategy as having been too broad in the scope of products covered³⁵⁹ and too antagonistic towards the Japanese and Soviet

357. A recent study characterizes the whaling issue in these terms. See *THE WHALING ISSUE IN U.S.-JAPAN RELATIONS* (J. Schmidhauser & G. Totten eds. 1978) [hereinafter cited as *THE WHALING ISSUE*].

358. According to a boycott handout, American groups that supported the boycott included the National Audubon Society, Friends of the Earth, the Environmental Defense Fund, the Humane Society of the United States, the National Wildlife Federation, the Sierra Club, and the Animal Welfare Institute. Not all of these groups still support the boycott.

359. A more rational relationship between the environmental issue and the products

peoples.³⁶⁰ As Schmidhauser and Totten have argued:

The environmental citizens groups in the United States could take more care not to engender anti-Japanese sentiments in stating their positions or in the tactics they employ and also to have greater sensitivity to the different cultural responses certain tactics, such as the boycott, have in the Japanese context.³⁶¹

These are legitimate concerns in view of an ever-increasing global interdependence. At the same time, the lesson of the boycott is clear—governmental action can no longer ignore the interests or power of foreign citizens.

Greenpeace's interventions on the high seas constitute direct action of a different sort. To a great extent its intervention has been symbolic and aimed more at stimulating political action than achieving immediate objectives. The organization was born in 1971 when it sailed into American and French nuclear test zones in the North and South Pacific.³⁶² It did not enter the whaling controversy until 1975. At that time, it located a Russian whaling fleet off the California coast and, with the intention of disrupting whaling operations, placed its own smaller vessels between the fleet and the whales.³⁶³ These actions on the high seas have an incipient international legal basis: they are designed to assert the primary principle of a common interest and right in the use and protection of high seas resources over the unbridled freedom to exploit it.³⁶⁴ They also serve to mobilize public concern on the whale conservation issue and on environmental issues in general. As with other direct demonstrations of opposition to environmental threats, these actions demonstrate the need for a more participatory and responsive political process. As a consequence, their impact ultimately depends upon the accompanying political and legal strategies undertaken by the entire whale conservation and environmental movements.³⁶⁵

boycotted has often been suggested as a better strategy. In the whale context, a logical target would be Japanese fisheries products or perhaps the products of the specific companies with an economic interest in whaling. A broad assault on all Japanese products may dilute the impact that would have resulted from a more focused approach.

360. Japanese whaling interests frequently have proclaimed that the boycott is a product of American manufacturers anxious to squeeze out competition. To the extent the boycott has fired defensive feelings, many have argued that in the long term the boycott may reduce desirable popularly based cooperation between Japanese and foreign interests.

361. THE WHALING ISSUE, *supra* note 357, at 266-67.

362. See Katzenstein, *Saving Whales' Lives is Risky, Rewarding For Ecology Group*, Wall St. J., Sept. 24, 1976, at 1, col. 1.

363. For a vivid description of the organization and of this incident, see Perlman, *Confrontation*, OCEANS, July-Aug. 1977, at 49-53.

364. The objective is to challenge the belief that the resources of the high seas belong to no one and are therefore free for the taking. Under contemporary legal expectations, however, the whaling industry has a legal right to exercise its high seas freedoms, especially if it acts in accordance with IWC regulations.

365. For a study of Greenpeace's activities, see R. Mandel, *Transnational Resource*

A less radical form of transnational nongovernmental pressure is coordination and mutual assistance in lobbying domestic governments. American environmental organizations have been central to this function. The Sierra Club, an influential and active organization in its own right, for years submitted a joint statement on behalf of many environmental organizations to the IWC. More importantly, many offshoots of this single organization have gone on to become multinational actors on their own. These include the Friends of the Earth International, now active in more than a dozen countries and well known for its opposition to whaling.³⁶⁶ Project Jonah and Greenpeace also were offshoots of the Sierra Club.

In lobbying governments, the Washington-based organizations have for years taken the lead. Through their effects on the policies and legislation of the U.S. Government they have a substantial influence on a wider level. The 1971 moratorium resolutions in Congress³⁶⁷ were promoted by the Society for Animal Protective Legislation and the International Society for the Protection of Animals. These and other organizations initiated renewed moratorium resolutions in 1979.³⁶⁸ The Marine Mammal Protection Act was backed by the Friends of Animals. The new Packwood-Magnuson amendment³⁶⁹ was put forth at the suggestion of the Defenders of Wildlife.³⁷⁰

An additional source of influence for these groups has been their continuing access to one of the most important actors in the global decisionmaking process, the U.S. Government. This access is also useful for other environmentalists. Washington-based groups long provided a stream of information to all groups and, through their access to the bureaucratic and legislative machinery, a continuous entree to the management process. Nevertheless, in later years the center for actual

Conflict: The Politics of the Whaling Industry (Mar. 21-24, 1979) (paper presented at the Annual Meeting of the International Studies Association, Toronto, Canada).

366. For an example of FOE's involvement in another issue, nuclear energy, see A. LOVINS, *SOFT ENERGY PATHS: TOWARD A DURABLE PEACE* (1977), published by Ballinger Publishing Co. and FOE International.

367. S.J. Res. 115, 92d Cong., 1st Sess., 117 CONG. REC. 22,668 (1971); H.R. Con. Res. 387, 92d Cong., 1st Sess., 117 CONG. REC. 38,537 (1971). See ANIMAL WELFARE INSTITUTE INFORMATION REPORT, Jan.-Mar. 1971. The Institute, founded in 1951, and the Society for Animal Protective Legislation, founded in 1954, have been a continuous prod on behalf of protective animal legislation over many years when the issue was not seen as particularly serious. See ANIMAL WELFARE INSTITUTE, *ANIMALS AND THEIR LEGAL RIGHTS* (1978). The organization has also sponsored the Albert Schweitzer award that has been given to, *inter alia*, Senator Hubert Humphrey and Costa Rican President Obuder for their conservationist activities.

368. S. Con. Res. 14, 96th Cong., 1st Sess., 125 CONG. REC. 2927 (1979); H.R. Con. Res. 87, 96th Cong., 1st Sess., 125 CONG. REC. 1737 (1979).

369. See text accompanying note 321 *supra*.

370. Interview with Christine Stevens, Animal Welfare Institute, in Washington, D.C. (Apr. 21, 1979).

transnational coordination has been in the United Kingdom as much as in the United States, initially through Friends of the Earth and currently through the Marine Action Centre. London FOE's primary whale lobbyist in recent years, Joanna Gordon Clark, created the Marine Action Centre in order to monitor closely the activities of the Commission. The Centre's monthly newsletter is circulated worldwide and ties together disparate groups seeking information and coordination.

This transnational cooperation has occasionally resulted in very concrete coordination when dealing with a specific government. This effect was most notable in the campaign waged by Project Jonah in Australia against that government's continued whaling, when numerous experts and environmentalists were brought in to organize activities and testify at the government inquiry. In large measure, however, the lobbying function in the various national capitals is performed by domestic organizations. Here again, this national lobbying is most sophisticated and effective in the United States, where countless organizations with large memberships have perfected the techniques of raising money, organizing protests, stimulating public interest, and obtaining access to the bureaucracy and politicians. Outside the United States, only groups in Australia, New Zealand, and the United Kingdom have had any significant success. In no other country to date has there been any comparable level of lobbying or success.³⁷¹

B. Proposals for the Future: Toward a Democratic Environmentalism

The foundation of whaling regulation, as we have seen, is a configuration of economic and political power. Until the 1970's, such power was not allied to the cause of whale conservation nor even to the Commission itself. Little premium was put on either the creation of or compliance with IWC decisions. The rules were unscientific and reflected the free use of the objection procedure. In effect, the Commission had only an advisory role.

This situation began to change in the 1970's with the development of a political environmental lobby that transformed the policies of some states and the strength of the international regulatory structure within the IWC and other organizations. The effect of these changes was to increase the importance of activities inside the Commission: votes counted.

To an international lawyer concerned with the future of the global environment, it is not enough to talk about international law in the

371. On the general nature of environmental lobbying in the United States, Japan, and the Soviet Union, see D. KELLEY, K. STUNKELL & R. WESCOTT, *supra* note 5, at 149-54, 166-72, 186-89.

abstract. With law the product of a shifting pattern of policies and powers at the international and domestic levels, an understanding is required that transcends mere legal formalism. Before turning to a legal analysis of the IWC, a few conclusions and recommendations concerning its political underpinnings at the international and national levels should be highlighted.

At the national government level, we have seen how economic interests have motivated states in their attitudes toward whales and whaling. Initially, the lure of new national income and employment, combined with pressure exerted by fisheries interests, encourages entry into the business and exploitation of the "resource." Many whale populations are so depleted that they no longer provide this lure, although it still exists for some coastal cetacean populations and is also a serious enticement in the Antarctic for those nations anxious to harvest krill.³⁷² After the investment has been made, government policy emanates from the desire to protect that investment. This concern is heightened by the resulting dependence of benefited groups. Since scientific certainty lags behind the economic pressures, the only safe course is to control exploitation in advance.

The issue that has been at the heart of the history of the IWC is the need to redress at a structural level the imbalance between economic and environmental considerations in decisionmaking. At the international level, a restructuring of the IWC is desirable. But such a development will not take place unless basic changes first occur within states. The foregoing study of the problems in whale conservation points to a number of changes that would be beneficial.

First, a successful program of economic and environmental control demands that the present process of representative government be redesigned to be more open and accessible to representatives of noneconomic interests. A simple yet effective way to remedy the current economic-environmental imbalance is to enact legislation facilitating public input into decisions wherever the public interest is affected.³⁷³ The objective of such legislation should be to redirect economic and bureaucratic management towards participatory and demo-

372. See text accompanying notes 431-40 *infra*.

373. By legislating to improve popular involvement in decisionmaking, the government could help transform "pressure group" activity into a more broadly based form of participation—indeed into a new structure of government. This strategy would allow for gradual generation of alternatives through democratic debate, rather than the imposition by government of a rigid concept of an alternative society. Unfortunately, faith in technocratic competence has not yet been shaken by events that point to its weaknesses. Even so, as popular demands for self-determination in the face of centralized economic and bureaucratic decisionmaking grow, so does the possibility of confrontation.

The author urges legal scholars to consider the legal and political mechanics of an "ecological transition." If decentralized participatory structures can be accepted as one path to a stable polity, issues which must be addressed include accountability, funding, administra-

cratic decisionmaking. Not only would this change increase bureaucratic accountability at all levels but it would aid government leaders in resisting the narrow, short-term pressures of economic interests. Access to information, participation in bureaucratic decisions, rights of legislators to demand hearings, public participation on international delegations—these are a few areas where the national governments are greatly underdeveloped. This failure is most evident in the regulation of whaling, about which only the United States has demonstrated any degree of openness. Even in those countries with a parliamentary system, the centralized, hierarchical nature of that system has made democratic control of bureaucratic actors and participation in governmental policymaking difficult. In still other IWC nations, no process for public participation in decisions concerning the whale issue seems to exist.

The overexploitation of the whale is only one manifestation of more basic problems. Thus, a second change that should accompany the introduction of ecological values into public decisionmaking is reconsideration of the attitude toward current economic problems. A broader perspective will be necessary to cope with the larger economic transformation that long-term ecological balance will require. In the face of the consequences of past decisions and processes, today's governments remain crisis-oriented; they are preoccupied with a continued and immediate economic expansion, however futile or destructive that may be. Yet, as the plight of the whales indicates, our present wealth is based to a significant degree on global, ecological overextension. One way to foster a larger transformation in economic systems is to have open debate on a range of specific issues. Difficult governmental decisions will be more palatable to an electorate that has been made aware of the true costs of economic activities. If the present dearth of opportunity for public debate continues,³⁷⁴ an escape from the inertia of expanding expectations will likely be impossible.

In addition to informing the population of the externalities that are associated with economic decisions, discussion of the issues will generate new options. Taking advantage of the energy and imagina-

tion, organizational structure, degree of centralization, and methods of access to government.

374. Many surveys point to the public's continued support for environmental values. See Carter, *Public Support for Environmental Protection Remains Strong*, 203 SCIENCE 154 (1979). If debate uncovers hidden costs that underlie the production of environmental benefits, then under simple economic reasoning, consumption will fall automatically (all other things being equal). This decline does not, therefore, depend on the assumption of a strong environmental commitment among the population but only that, all other things being equal, people prefer a healthy environment. The question of economic "externalities" is at root a political rather than economic question. Economists blithely note the existence of externalities which distort their otherwise perfect models. In reality, however, only a realignment of political powers and processes can force the internalization of externalities.

tion of citizens and organizations not enmeshed in the confining structure of elite bureaucratic politics would allow new ideas to surface.³⁷⁵ Many of the environmental organizations discussed in this paper have sophisticated conceptions of an "alternative" society, yet under prevailing governmental processes, they are usually treated with skepticism and given short shrift. Thus, much wisdom and support for change currently is being wasted.

States must also improve the interstate process of control and enforcement. Legislation has been adopted in the United States which will pressure other states to participate in and observe international standards. The Pelly³⁷⁶ and Packwood-Magnuson³⁷⁷ amendments are a particularly useful type of national enforcement of international agreements that could be implemented as a result of popular pressure within the sanctioning states, since national governments are normally not motivated to act against those violating international environmental regulations.³⁷⁸ Such legislation also increases the leverage of one state over a violating state, since it allows linkage between compliance with the international regulation and access by the violator to the market of the sanctioning state. In the case of whaling, U.S. sanctions limited to prohibiting whale product imports would be an empty gesture, since such imports are already prohibited. Under the amendments, however, the United States could impose the more serious sanction of prohibiting fish imports from a state such as Japan that violates IWC regulations.

Through a variety of Pelly-type legislative tools, a global functionalism³⁷⁹ could be constructed that would transcend the natural limita-

375. It now seems that only catastrophe brings forth these new ideas. This is clearly an undesirable basis for decisionmaking because it comes too late—only after the essential directions have already been established. Nevertheless, as a result of institutional inertia, catastrophe may be a necessary precursor to systemic change.

376. See text accompanying notes 119-20 *supra*.

377. See text accompanying note 321 *supra*.

378. The experience with pirate whaling attests to the lack of interest of most states in any activity not affecting them economically. Although any interested state easily could have gathered the information about these operations, none did. It was left to the concerned NGO's to do so. The controls envisioned here would enforce international rather than national standards. To extend the argument to the latter would open the approach to justifiable charges of "eco-imperialism."

379. Traditional political theories of functionalism have focused on technical international organizations as the basis on which functional linkages would slowly evolve until a "working peace system" will have been created. Unfortunately, states in such organizations are as jealous of their political sovereignty as are states in the more overtly political organizations. As a result, few act outside the boundaries set for them by states. In the approach suggested here, a web of low-level, issue-related sanctions are to be created to restrain state violations of international agreements by making states subject not just to the decisions of other states, but to domestic popular pressures. In this way, the state becomes an instrument of, rather than a barrier to, global functional integration. Moreover, by linking popular pressure with the legal instruments of international organizations, this functionalism facili-

tions of the nation-state system. A reliable network for the enforcement of international obligations will only be created by enacting such regulations in many countries. This network is required not only for whale conservation, but in all areas of international economic independence. Intranational mechanisms for enforcing international agreements are not new to international law and politics, and they may become increasingly important in the approaching "age of interdependence."

This prescription for states entails a vastly expanded role for political "pressure groups." An issue of concern, then, is the future of these groups. There is no doubt that such organizations have had a tremendous impact in the last ten years.³⁸⁰ This impact, however, has largely been to slow the increase in the rate of environmental degradation rather than to reverse it. Basic attitudes and behavior still have not changed, and, with growing economic and related military crises, the scope of the challenge has become larger and more diverse. The goal of environmental organizations must be, therefore, not only to resolve specific problems but to do so in ways that will contribute to the eventual structural change that is necessary in both economic and political systems. The whale conservation movement has conspicuously failed to do this.³⁸¹

If this change is to come about, environmental NGO's must be able to bridge the economic-ecological gap. Many ecologists reject the dominant economic approach of centralized technocratic expertise and control and opt instead for a simpler, decentralized society in which human fulfillment and ecological balance are valued.³⁸² Yet, if our present processes are to change, those with a vision of an alternative must relate constructively to decisionmakers without becoming absorbed by them. While attempting as much as possible to live lives reflecting their visions, ecologists must also develop the technical and

tates the growth of transgovernmental alliances between IGO's, NGO's, and sympathetic national officials.

380. For a brief account (with extensive references) of the rise of the environmental movement in the United States, see Bowman, *The Environmental Movement: An Assessment of Ecological Politics*, 5 ENV'T'L AFF. 649 (1976).

381. While the cause of cetacean conservation incorporates many ecological values, its proponents often are not concerned with the broader objectives of the ecological movement. By ignoring this context for the whale issue and instead seeking only specific governmental initiatives to protect the whale, the whale conservation movement could well become irrelevant. One author has suggested that the challenge of the 1980's is to move from a "shallow environmentalism" of enlightened self-interest to a "deep ecology" in which man is seen as an integral part of, rather than apart from nature. Devall, *The Deep Ecology Movement*, 20 NAL. RES. J. 299 (1980).

382. The work of social ecologist Murray Bookchin presents this approach most clearly. In a recent critique of trends in environmentalism, he argues for a system of "affinity groups, direct democratic participation, and direct action." Bookchin, *An Open Letter to the Ecological Movement*, RAIN, Apr. 1980, at 3.

political capabilities to be both credible and challenging. The public is lulled by the deference to governmental "expertise" that can be challenged only by groups that maintain access to the political bureaucracy and credibility with the media and the public.

With their own skills, NGO's must develop effective organizational structures to achieve their objectives at both the governmental and popular levels. Given the complexity of the problems being confronted, the general resistance to these groups encountered in most countries, and the variety of skills and resources required to be effective, this development will not be easy. In this organizational structure, there is a critical need to resolve the ever-present dilemma between the effectiveness of an elite organization and the accountability of a democratic ("grassroots") one. These organizations must develop structures that will ensure effective internal operation and, most importantly, be able to develop and control the power they seek and eventually may acquire.

Finally, the organizations should develop constructive cooperative arrangements among themselves. Despite the wide array of popularly based NGO's on an assortment of related issues, they are often competitive and certainly poorly coordinated so that their power and resources are underused. Indeed, perhaps the greatest challenge confronting the environmental community is to foster an alternative to our system of hierarchical organization by developing a process of "networking" between organizations.³⁸³

NGO's also should continue their trend toward transnational coordination. The creation of the Marine Action Centre is an example of what is needed for coordination of efforts in marine conservation, and similar entities are necessary in other areas of environmental concern. The Marine Action Centre is organized around specific issues and aids existing groups instead of competing with them. Finally, since it is close to the IWC, it can monitor that body. As a "liason and information centre on whales, krill and other marine conservation affairs," the Marine Action Centre is an important addition to the environmental movement.³⁸⁴ The IUCN, with its new publication, *World Conserva-*

383. A detailed analysis of alternative organization arrangements would contribute to both the practice of environmental politics and to relevant theories of organization and government.

384. *Ad hoc* coalitions are also increasingly evident. At the 1979 Costa Rica Biennial Meeting of the Parties to CITES, there was a coalition of 32 environmental organizations. Letter from M. Kaufman and J. Barnes, Antarctic and Southern Ocean Coalition, to various NGO's 2 (Jan. 4, 1980). Three hundred such organizations worked together at the Bonn Conference on Migrating Species. *Id.* at 2-3; see text accompanying note 33 *supra*. A new Antarctic and Southern Oceans Coalition was also created in 1980 for the meeting of the Antarctic treaty powers proposing a krill convention. Letter from M. Kaufman and J. Barnes, Antarctic and Southern Ocean Coalition to various NGO's 1 (Jan. 4, 1980); see text accompanying notes 423-78 *infra*.

tion Strategy, has also begun to draw together and channel global environmental activism.³⁸⁵

Each NGO should continue to improve communication and coordination among its own offices in various countries. Communication and coordination are the strengths of the multinational corporation but are still minimally developed within the environmental community. FOE is intentionally decentralized and coordination takes place only on an *ad hoc* and informal basis. One of the reasons for coordination is ensuring that the momentum of the organization is not dissipated into a number of nationalistic bodies. By working as a transnational unit, an NGO can more easily achieve a global perspective. FOE's internal differences over the bowhead issue—the American branch wanted the United States to file an objection—exemplify the problem of uncoordinated attitudes. On the other hand, attempts to achieve too rigidly centralized authority are bound to fail. The experience of Greenpeace in its two-year search for an "international board" attests to the pitfalls of this approach.³⁸⁶ A closely coordinated but cooperatively managed organizational arrangement that maintains a multinational perspective while being rooted in local needs is most desirable.

Existing NGO's should assist in the development of new environmental NGO's in different countries and build alliances with them. This is a costly and difficult task, but it is essential if a global ecological foundation is to be built. This task will be especially difficult in developing countries that have little or no experience with pluralistic politics and do not give high priority to environmental protection. Since these countries are undergoing rapid industrialization and economic exploitation, however, the need there is urgent. Stimulating the development of allied organizations will be the major task of NGO's in the years ahead, especially because the resulting alliances will challenge the assumptions of the environmental politics that have so long been confined to the developed states. The advantage of internal pressure is evident from the success of Project Jonah in Australia which would never have been possible with only external pressure. Yet only external pressure has been exerted in Japan. There, as elsewhere, Western NGO's must assist in the development of an indigenous national lobby with transnational concerns and connections.³⁸⁷ Since international regulations reflect only the lowest common denominator (standards

385. INTERNATIONAL UNION FOR CONSERVATION OF NATURE AND NATURAL RESOURCES, *WORLD CONSERVATION STRATEGY* (1980).

386. The flow of power into Greenpeace, with its unsophisticated structure, caused the organization to disintegrate. By mid-1979, Greenpeace was involved in an interoffice lawsuit, which was dropped after a decentralized coordinating structure was adopted.

387. For a proposal to this effect, see Gresser, *A Japan Center for Human Environmental Problems: The Beginnings of International Public Interest Cooperation*, 3 *ECOLOGY L.Q.* 759 (1973).

agreeable to all states), internal pressure will be necessary if the expanding exploitative economic ideology is to be limited by international environmental controls.

V

LAWS OF WHALING AND ANTARCTIC EXPLOITATION

The above evaluation of the political interaction between economic and environmental interests demonstrates the shortcomings of the present framework for international protection of the environment. Recent conferences have addressed proposals and draft conventions for both the IWC and a convention on marine living resources of the Antarctic. None of the proposals for either organization would establish an effective regulatory body. The inadequacy of the proposals is particularly significant for the new Antarctic treaty, since there is no existing regime and the consequences of failure of the Antarctic Commission to regulate effectively will bear not only on the future of whales but also on the health of the entire Southern Hemispheric oceanic system. Despite the vivid specter of IWC failures looming in the background, old patterns prevail. This Perspective will consider these proposals and contrast them with an ideal structure for international environmental protection.

Prospects for an improved convention for the conservation of whales are bleak. Recent negotiations on the subject have been unproductive and have moved toward possible weakening rather than toward strengthening of the convention.³⁸⁸ Because the existing legal structure has evolved into a fairly stable balance of forces, it now seems advisable to safeguard what has been achieved rather than seek a wholesale revision.³⁸⁹ Specific revisions through a protocol to the existing convention will provide incremental improvement, but these proposals are unlikely to be accepted by the diverse membership. The discussion that follows, therefore, will outline an ideal convention. At the same time, a draft revision for the IWC will be examined in light of the ideal.

388. The most recent discussion was held in Lisbon in November 1979. The meeting was inconclusive, as was the July 1978 renegotiation in Copenhagen.

389. One author suggested this when he noted that "the weaknesses of the IWC are not so much the structuring of the institution as they are the inabilities of its members to use the structure in order to implement the goals set forth in its charter." C. Christol, *The Prospects for Transnational Policy-Oriented Parties: The Environmentalists, the Whaling Industry, and the International Whaling Commission 18 (1976)* (paper for the Western Political Science Association, San Francisco, Cal.). The legal improvements of the last few years, such as the incorporation of the New Management Procedure, have been achieved through changes to the Schedule, rather than to the convention itself.

As A.W. Koers noted, the IWC is worse than most fisheries conventions, but not by much. A. KOERS, *supra* note 67, at 88-89. Of course, legal weaknesses are exaggerated in their impact on whales because of their unique biological characteristics.

A. *Approaches to a Conservation Convention: An Ideal for Human-Whale Interaction*³⁹⁰

As a first consideration, the preamble to a conservation convention should set out clearly a scale of priorities for conservation and use of the organism being regulated. The basic premise must be that conservation is necessary in its own right and not only as an adjunct to exploitation. As part of this new outlook regulators should attempt to remove the subject-object bias whereby all things are reduced to mere commodities for "objective" manipulation. In both the social and physical sciences, this perspective increasingly is being challenged.³⁹¹ It should also be rejected in the ecological sciences by replacing such anthropocentric terms as "resource" and "stock" with words more conducive to an appreciation of the inherent worth of whales and other creatures. Most important, a conservation convention should not explicitly encourage exploitation as inevitable or desirable.³⁹² The present whaling convention, although it refers to the need for whale conservation,³⁹³ does so only in the context of the "orderly development of the whaling industry,"³⁹⁴ and on the implicit assumption that whales are an exploitable resource that, if properly managed, will increase in numbers. A new convention, by contrast, should recognize that man needs to preserve and protect whales and their ecosystems in the face of their interaction with man.

The second premise of this preamble should be an admission of our ignorance of the individual and social characteristics of the animals being exploited and of their habitats. The precarious situation of the whale stems directly from our failure to admit this ignorance. Thus, it is important to learn about all aspects of the whale, not just its exploitation. Present confidence in the ability to manipulate the "resource" should be rejected; in its place the importance of uncertainty should be recognized as the focus of our concerns. This attitude can be embodied

390. The discussion in this section is not exhaustive but discusses what are perceived to be the basic structural changes needed in light of the past failures of the 1946 Whaling Convention. For a more detailed analysis, see P. Birnie, *The Development of International Regulation of Whaling: Its Relation to the Emerging Conservation of Marine Mammals* (Dec. 1979) (unpublished Ph.D. dissertation, University of Edinburgh).

391. The subject-object perspective imparts a false assumption of impartial omniscience and detachment to the subject while degrading the inherent worth of the object except insofar as conferred by the subject. See, e.g., Diamond, *Anthropology in Question*, in *REINVENTING ANTHROPOLOGY* (D. Hymes ed. 1972); Habermas, *Technology and Science as "Ideology,"* in *TOWARD A RATIONAL SOCIETY* 81 (1970).

392. This would be contrary to the unquestioned belief that "full utilization" is desirable, which has been evident among participants in the law of the sea negotiations. The weakness of the exploitation approach is the failure to examine the goals of exploitation, whether economic profit, the provision of protein for hungry nations, or the simple enjoyment of nature.

393. 1946 Whaling Convention, *supra* note 47, preamble.

394. *Id.* para. 8.

in the regulation process by allocating to the exploiter the burden of justifying the need for and safety of exploitation.³⁹⁵ Ideally, exploitative activity should not exceed the level at which its possible detrimental effects are understood, and an adequate safety margin should be established.

In addition to raising the status of the "resources" and recognizing explicitly the extent of our ignorance about them, the preamble should, as a third premise, specify criteria that should govern our relations with the victims of our exploitation. For example, the new draft of the whaling convention introduces social and "aesthetic values," but these are subsumed under the larger anthropocentric goal of "rational utilization."³⁹⁶ Even within a traditional exploitative framework, nonconsumptive values should take priority over consumptive values where the latter are nonessential or threaten the former.³⁹⁷ To the extent that consumption must take place, its control should not be limited, as under the present whaling convention, to measures that can be taken "without causing widespread economic and nutritional distress."³⁹⁸ Such a provision only serves to elevate short-term economic interest over long-term ecological balance. Finally, any exploitation should be "humane."

The second important consideration in an ideal whaling convention is its jurisdictional scope. The major jurisdictional issues are the basis and extent of a commission's powers to control certain activities.³⁹⁹ These issues are tied to the broad question of who has property rights in the natural world. Ideally, legal rights would be vested in the animals themselves. This approach would be compatible with a balanced and integrated vision of man and nature and has been widely discussed. Christopher Stone's essay in the U.S. legal context, *Should Trees Have Standing?*, represents the most advanced formulation of

395. See text accompanying notes 23-25 *supra*.

396. Revision of the Text of the International Convention for the Regulation of Whaling, Preamble (Preparatory Meeting, Copenhagen, July 4-7, 1978) [hereinafter cited as Draft Whaling Convention].

397. These priorities are discussed in greater detail when the matters of decisionmaking and organizational structure are considered. See text accompanying note 414-16 *infra*.

398. 1946 Whaling Convention, *supra* note 47, preamble.

399. In recent years, the IWC has extended its jurisdiction to include small cetaceans. There are small cetaceans off the coasts of approximately 100 nations, yet few of these nations are members of the Commission. If these coastal states did join, it would transform the Commission into a different organization. An IUCN working group studied this issue and concluded that another method of control, perhaps using existing regional fisheries commissions, would be more successful. International Union for Conservation of Nature and Natural Resources, Report of the Working Group on the Management of Whales 2 (1978). Certainly many small cetaceans are killed or "culled" as an incident to regional fisheries activities. A separate organization, whose bureaucratic purpose was cetacean conservation, however, would likely be more effective than regional fisheries commissions which are themselves dedicated to maximizing fisheries production.

this approach: granting to natural objects a legal right to representation in courts.⁴⁰⁰ Others have supported this proposal,⁴⁰¹ including its extension to the international community.⁴⁰² Yet this approach has been incorporated neither in domestic nor international law.

Similar to granting legal rights to flora and fauna is the more generally acceptable concept of the "common heritage of mankind" under which a natural asset is owned by everyone and is not subject to taking except with the permission of a designated authority representing community interests.⁴⁰³ Despite the current legal status of great whales as *res nullius* (owned by no one but capable of being appropriated by the first taker), there is ample support for treating them as a "common heritage." M. Jose Leon Suarez, rapporteur for a 1924 League of Nations Committee of International Law, cautioned that the whaling industry was "rapidly exterminating the whale" and suggested that "the riches of the sea, and especially the immense wealth of the Antarctic region, are the patrimony of the whole human race."⁴⁰⁴ Dean Acheson, in his address to the conference that drafted the 1946 Whaling Convention referred to whales as the "wards of the entire world."⁴⁰⁵ If the "common heritage" approach were taken, cetacean populations would be subject to international control wherever found.

Currently, in the absence of property rights to the animals vested either in the animals themselves or in the world community, the animals are treated as *res nullius*, and the effectiveness of IWC control depends on the extent to which states are willing to yield authority to international controls. In practice, this fact has produced a debate between coastal states and international authorities over the nature and extent of territorial jurisdiction.

400. C. STONE, *supra* note 30.

401. See Favre, *supra* note 30, at 242-43; see also Burr, *Toward Legal Rights for Animals*, 4 ENV'TL AFF. 205 (1975). Much of the conservation issue results from the lack of standing of individuals to protect an environmental concern in which they have no property right. This problem is exacerbated in international law where nongovernmental bodies generally have no standing. On personality in international law, see D. O'CONNELL, INTERNATIONAL LAW 89-124 (1965). On the lack of standing of nongovernmental entities at the World Court, see S. ROSENNE, THE WORLD COURT: WHAT IT IS AND HOW IT WORKS 74-76 (1963).

402. See Lilly, *The Rights of Cetaceans Under Human Laws*, OCEANS, Mar. 1976, at 66. This would offer a useful role for environmental interest groups. For suggestions on their possible activities in protecting the assets of the oceans, see R. HALLMAN, TOWARD AN ENVIRONMENTALLY SOUND LAW OF THE SEA 70-77 (1974).

For a discussion of the application of "public trust" doctrine to the international environment, see Nanda & Ris, *The Public Trust Doctrine: A Viable Approach to International Environmental Protection*, 5 ECOLOGY L.Q. 291 (1975).

403. "Common heritage" must not be confused with *res communis* which applies to things owned in common and appropriable by no one, e.g., the high seas. On *res nullius* and *res communis*, see D. JOHNSTON, THE INTERNATIONAL LAW OF FISHERIES 308-17 (1965).

404. Suarez, *supra* note 41.

405. Quoted in P. Bock, *supra* note 40, at 121.

Ideally, the territorial jurisdiction of a conservation commission should coincide with the geographic range of its subject matter. One strength of the present IWC convention is that, as between its members, there is no territorial restriction on the application of its regulations. Of course, the Commission does not regulate the activities of nonmembers. Whether or not the extensive control over member nations will continue depends on the outcome of the current negotiations at the United Nations Conference on the Law of the Sea (UNCLOS). Under the Informal Composite Negotiating Text, coastal states are granted the sovereign right to manage and conserve marine resources within their "exclusive economic zones."⁴⁰⁶ These zones extend out to sea 200 miles from coastal baselines.⁴⁰⁷

This sovereign right was long an issue of serious concern to conservationists, who foresaw a dangerous restriction of international controls as a consequence of the expansion of coastal state authority. With many populations of cetaceans either resident within or frequently passing through the 200-mile zones of countless states, this matter is extremely important for the future. For years, article 65 left this unresolved, establishing not even minimal controls over coastal states.⁴⁰⁸

At the ninth session of the United Nations Conference on the Law of the Sea, held in New York in March 1980, the efforts of the American conservation community finally met with success. A revised article 65 guarantees that, at a minimum, coastal states would have to apply the international conservation standard to coastal marine mammal populations:

Nothing in this Part restricts the right of a coastal State or the competence of an international organization, as appropriate, to prohibit, limit or regulate the exploitation of marine mammals *more strictly* than provided for in this Part. States shall co-operate with a view to the conservation of marine mammals *and in the case of cetaceans shall in particular work through the appropriate international organizations for their conservation, management and study.*⁴⁰⁹

406. United Nations, Third Conference on the Law of the Sea Informal Composite Negotiating Text, art. 56, para. 1(a), 7 U.N. Doc. A/CONF.62/W.P.10 (1977) [hereinafter cited as UNCLOS 1977].

407. *Id.* art. 57.

408. Article 65 reads as follows: "Nothing in the present Convention restricts the right of a coastal State or international organization, as appropriate, to prohibit, regulate, and limit the exploitation of marine mammals. State shall co-operate either directly or through appropriate international organizations with a view to the protection and management of marine mammals." UNCLOS 1977, *supra* note 406, art. 65. For an analysis of this earlier draft of the text, see P. Birnie, *Extended Coastal State Jurisdiction and the Law of the Sea: Effect on Whales and Other Migratory Species* (1977). For a more general analysis of recent developments, see Mirvahabi, *Conservation and Management of Fisheries in the Exclusive Economic Zone*, 9 J. MAR. L. & COM. 225 (1978); Christy, *Transitions in the Management and Distribution of International Fisheries*, 31 INT'L ORGANIZATIONS 235 (1977).

409. United Nations Third Conference on the Law of the Sea, art. 65, U.N. Doc.

The issue of coastal state jurisdiction has also arisen in the negotiations for a new IWC convention. The desire by coastal states, especially Canada, to limit the IWC's jurisdiction to international waters has been a central reason for conservationists backing down from their demands for a renegotiation. The United States has met this coastal state expansion by urging a limitation on coastal authority, allowing coastal states to adopt only regulations that are stricter than the international standards.

A third important consideration for a conservation convention is the decisionmaking structure of the governing organization. The role and powers of a secretariat should not be limited to organizational responsibilities. Rather, it should be authorized to gather information on the operation of the convention, including problems of enforcement, to encourage the widest acceptance of the treaty by interested parties, and to provide data for scientific studies. Such authority would be invaluable in shaping the secretariat's attitude toward its role and, as has been the case with CITES, in making the organization effective. Under the existing whaling convention, the secretariat only organizes meetings, and, in fact, there was no secretariat at all until 1976.

In the proposed redraft of the whaling convention, one significant improvement has been the proposal to "institutionalize" the role of the Scientific Committee. Proposed article III, paragraph (6) states that this committee shall "make recommendations to the Commission on the conservation and rational use of the whale/cetacean stocks." This power is limited and would be much greater in an ideal convention. The Commission should be obliged to follow the recommendations of the Scientific Committee except where the Commission gives clear technical, economic, or other reasons for not doing so that are compatible with the stated objectives of the convention. The Scientific Committee of the IWC has recently acquired some power under the New Management Procedure, but this power still must be institutionalized to provide a firm legal basis for scientifically based decisionmaking.

The decisionmaking structure detailed in a conservation convention should also include a participatory role for intergovernmental and nongovernmental organizations. Currently, IGO observers at the IWC may submit papers and participate in the debates in the Scientific Committee, and they have done so most constructively. This privilege

A/Conf. 62/L.51 (1980) (emphasis added). Most cetaceans, including the great whales, are also listed in annex I of article 64. This article regulates the exploitation of "highly migratory species" according to a standard of "promoting the objective of optimum utilization." Because this conflicts with the permissible stricter conservation standard of article 65, the inclusion of cetaceans in Annex I can only be intended to ensure their conservation when they are taken incidentally to the exploitation of highly migratory fish species. Thus, it is fish and not cetaceans that are the focus of article 64.

should be extended to NGO's within the Scientific Committee and to both IGO's and NGO's in the Technical Committee, since this latter committee is, in essence, a "committee of the whole" and the basic working body. The benefits of allowing such participation would be to raise the standard of discussion and the acceptability of the result. This conclusion has been the experience of the Intergovernmental Maritime Consultative Organization (IMCO), a London-based U.N. agency that allows participation by all observers in all debates, though without the right to vote.⁴¹⁰ The experience with CITES has been similar. Checks against abuses of this procedure are available, and, if desired, the number of NGO representatives from industry, environmental, and aboriginal groups could be limited.

The rules of procedure of an international conservation organization should conform to standards of procedure generally accepted within international organizations affiliated with the United Nations. The importance of adopting such procedures grows as international bodies assume increasing authority. The existing procedural rules of the IWC certainly leave much to be desired. The press is barred from most deliberations, and observers have been formally prohibited from discussing developments with the media.⁴¹¹ Observers are excluded from many committees into which important issues are often channelled before disappearing. For example, at the thirtieth annual meeting, observers were excluded when the Infractions Subcommittee of the Technical Committee "considered" and apparently disposed of the issue of alleged massive violations by the U.S.S.R. of its quota. Similarly, a proposal at the twenty-ninth meeting to admit the press was

410. IMCO's Chief legal officer, Thomas Mensah, has written that

[a]ccepting advice from and relying on the expertise of specialized bodies is a major and now an established part of the institutional arrangement within IMCO. . . . The result is that it is very rare, if ever, that one finds their advice or proposals wholly unacceptable to the majority of governments in the respective IMCO organs and bodies.

Mensah, *The IMCO Experience*, in *LAW, INSTITUTIONS, AND THE GLOBAL ENVIRONMENT* 242-43 (J. Hargrove ed. 1972).

411. The following rules are distributed to observers at every meeting:

1. Comments to the media on discussions in committee meetings and in plenary sessions are prohibited until the Commission meeting has been completed. . . .
3. Following the conclusion of the Commission meeting observers may speak freely to the media subject to the following conditions:
 - (a) Attribution to individuals or countries of statements made at *committee* meetings, is prohibited.
 - (b) Quotations from, or use of, draft documents is prohibited.

Circular Communication: Commissioners, Contracting Governments, Scientific Committee, Observer Organizations, IWC Doc. RG/DG/1069 (July 18, 1977) (emphasis in original). These are far more restrictive than the rules that apply to U.N. agencies where NGO's have access, and, even though not enforced, the rules do impart an air of intimidation and illegitimacy to the debate.

referred to a "meeting of the Commissioners," and, despite its presence on the agenda as a formal proposal, it never arose again. Moreover, procedural disputes are decided by a majority vote of the Commissioners, hardly an appropriate way to ensure the observance of procedural safeguards that in theory were designed to protect the minority. Over the long term this is an important issue, not only for the IWC but for all international organizations.

The structure of the ideal organization would also include a dispute settlement procedure. The absence in the existing whaling convention of such a mechanism paralyzed the IWC for several years in the early 1960's.⁴¹² The new draft includes an article providing for the submission to arbitration of disputes on quota allocations. One party must initiate the process, but thereafter arbitration is mandatory.⁴¹³ Such provisions are essential, but they should not be restricted to quota allocations.

A fourth consideration for a conservation convention should be the elucidation of clear guidelines for decisionmaking that reflect the objectives established in the preamble. In the 1946 Whaling Convention, four basic criteria were set out to guide amending of the Schedule: amendments should (i) be based on the objectives of the convention, (ii) be based on scientific findings, (iii) not restrict the number or nationality of ships or land stations, and (iv) take into account "the interests of the consumers of whale products and the whaling industry."⁴¹⁴ The first three factors succinctly elucidate the types of guidelines that should direct the decisions on schedule amendments. The fourth factor is subsumed by the first. Even if guidelines incorporating values other than exploitation are included in the preamble or text of the Convention, the need to identify specific priorities to guide decisionmakers in carrying out their regulatory tasks remains. The following discussion seeks to set out such priorities for a variety of natural assets.

The allocation of "resources" among these conflicting demands is necessary to resolve the contemporary environmental crisis. Moreover, establishing a scale of ecological values would help correct the past tendency toward giving preference to short-term economic considerations over other values.

Very briefly, the following general approach might be desirable. The paramount value would be long-term conservation, first of the ecosystem as an interdependent complex and second of its animal and

412. See text accompanying notes 87-93 *supra*.

413. Draft Whaling Convention, *supra* note 396, Proposed New Article, at 11.

414. 1946 Whaling Convention, *supra* note 47, art. 5, § 2a-d.

plant populations. Thus, the top priority would be environmental preservation based on an understanding of the total ecosystem.

The conflicting values of conservation and consumption for survival must be balanced. Although no rigid hierarchy can be established, great weight should be given to cultural diversity and need when allocating sustainable uses. In the transition to a balanced steady state, nonconsumptive uses may often have to yield to the demands of essential consumption. Such demands would include aboriginal subsistence consumption, if it was an essential part of a traditional culture and subsistence pattern and would not exceed sustainable consumption. In giving cultural subsistence top priority, recognition is given to cultural diversity, but only with these very restrictive conditions. Second in importance are the direct, locally based subsistence interests of nonaboriginal groups. These traditional local distribution and consumption uses should be respected where sustainable and essential. Where exploitative, nonconsumptive uses could provide an economic replacement for such consumption, however, substitution should be encouraged, even if it requires changing tradition. This choice is clearly a value judgment, but one that takes into account the nonaboriginal nature of the tradition, the absence of any economic detriment, and, most importantly, the changing nature of contemporary social needs and pressures.

By giving priority to sustainable noncommercial subsistence uses of either a local or aboriginal nature, the fulfillment of protein needs for directly dependent communities is made a condition for nonexploitative values by those who can afford such values. Global ecology implies economic redistribution.⁴¹⁵ Only with such redistribution will the essential basis of the steady-state ecology—the noneconomic, personal appreciation of man's coexistence with nature—be able to flourish. Thus, nonexploitative, nonconsumptive use follows in the hierarchy of competing needs.⁴¹⁶

The last category to be addressed when the needs of ecosystem maintenance, subsistence, and environmental awareness are met are those of nonessential market uses. Satisfaction of general product demand should be given priority over fulfillment of the economic inter-

415. From the viewpoint of protein, as opposed to economic needs, much of today's fishing activity is extremely inefficient. One devastating indictment of world fisheries even concludes that expanded exploitation cannot be justified by world protein needs. Instead, more efficient utilization and distribution is required. See S. Holt, *A Contribution to Discussion of A New Economic Order with Reference to the Living Resources of the Ocean*, F.A.O. Doc. W/K9975 (Nov. 1977).

416. For the most thorough discussion of nonconsumptive use and its relation to various management strategies, see United Nations Food and Agriculture Organization, *Report of the Scientific Consultation on Marine Mammals*, U.N. Doc. ACMRR/MM/SC (Sept. 1976).

ests of industry. Industry's interests should be distinguished from those of consumers, since the profit goals of industry often do not coincide with the consumer's interest in a continuous flow of the desired goods. Finally, the interests of the industries of the developing nations should take priority over those of the industrialized world.

In summary, a desirable scale of priorities for human relations with whales and other natural assets might be set out as follows:

<u>Conservation of the Entity</u>	
Ecosystem Resident Populations	
<u>Nonconsumptive Uses</u>	<u>Essential Consumption</u>
Exploitative	Aboriginal: subsistence and cultural
Nonexploitative	Direct Subsistence
<u>Nonessential Consumption</u>	
"Consumer" product demand Industry development Of developing countries Of developed countries	

In the history of the International Whaling Commission, regulation has proceeded on the basis of a scale of priorities almost the reverse of that proposed here, with the least important priority given foremost consideration.

A fifth important consideration for a conservation convention should be to base allowable use on a firm foundation of scientific findings. Strong direction for decisionmakers is necessary to ensure that resource use begins cautiously with a requirement for extensive scientific study before any significant exploitation is allowed. A strengthened role of the secretariat in initiating and conducting research would be especially useful. Only with the legal onus on the exploiter to justify any quota in advance of exploitation, however, is there any likelihood that sufficient financial and logistic support for such research would be forthcoming. The burden of justifying proposed increases should rest entirely on the exploiter, with the Commission automatically refusing any increases for which sufficient data is not provided.⁴¹⁷ On the basis of the data available to the Commission during its earliest phases of operation, a low level of exploitation should be allowed; thereafter the Commission should authorize increases only where the industry has submitted evidence based on reliable monitoring and full reporting of data demonstrating that the proposed levels would afford sufficient protection of whales. The Commission should require that data be sub-

417. The importance of this onus of proof is obvious enough in the context of justifying quota levels, but it might also be pointed out that a rejection of the moratorium as having "no scientific basis" is essentially a question of the burden of proof. In the face of continuing uncertainty there is also no scientific basis for whaling.

mitted in its raw form for scientific analysis, and it should have facilities and personnel sufficient to give careful consideration to these data.⁴¹⁸ Substantial funding independent of government or industry control is necessary. Once these data have been analyzed, the Commission should set quotas that optimize the relevant conservation and ecosystem values. Without an independent and authoritative data base, however, any claim to scientific management is fallacious.

As a sixth consideration, an ideal whaling convention should apply conservation standards to the process of exploitation. The existing whaling convention prohibits restrictions on the number or nationality of factory ships or land stations. This prohibition was included to prevent the Commission from interfering with free competition in whaling. Ideally, however, the Commission should be able to change the purely economic treatment of the natural world. Most important would be the ability of a conservation commission to regulate the total effort that could be applied to exploitation and thus reduce the incentive to overcapitalize.⁴¹⁹ The incentive to overexploit would be further weakened by a provision establishing compulsory arbitration for disagreements concerning allocation of a nation's quota. The Commission should be empowered to set national quotas, although those who feel they have a competitive edge will oppose any such provision. It is crucial that neither investment nor exploitation be allowed to outrun the regulatory controls so that the IWC may avoid the difficult political situation that accompanies any attempt to cut back.

The final significant concerns for any new convention are implementation and enforcement.⁴²⁰ As John Baden has pointed out, enforcement is all important in the realm of public goods: "In the absence of enforceable property rights to a resource or service, it is extremely difficult for those involved to reach voluntary agreements."⁴²¹ This fact has been amply demonstrated at the IWC. Only when the threat of sanctions becomes real, as with the Pelly amendment and the economic boycott, does "voluntary" agreement result and the objection procedure dwindle in usefulness.

418. An international research body for marine mammals would be appropriate. This is especially critical given the eternal struggle within the IWC Scientific Committee between government and IGO scientists.

419. See Draft Whaling Convention, *supra* note 395, art. V(1)(e). The pressure to overcapitalize results from a competition over "common pool resources." Albert Koers notes that the IWC is exceptional among "fisheries" organizations in having no direct or indirect allocation function and, instead, actually having a restriction on that function. A. KOERS, *supra* note 67, at 183-84, 204.

420. For a comparative assessment of general problems of enforcement, see W. BURKE, R. LEGATSKI & W. WOODHEAD, NATIONAL AND INTERNATIONAL LAW ENFORCEMENT IN THE OCEAN (1975).

421. Baden, *A Primer for the Management of Common Pool Resources*, in MANAGING THE COMMONS, *supra* note 8, at 141.

Provisions for the implementation of established regulations can be divided into two groups: those affecting control of a commission's own members and those concerned with activities outside the commission. With regard to implementation affecting commission members, an objection procedure is highly undesirable since it readily converts the regulatory process into political bargaining and undermines agreements after they have been concluded. Nevertheless, it is doubtful that the IWC will eliminate the procedure as long as the states refuse to give up national sovereignty.

Improvement is feasible in the IWC's inspection procedure, however. Currently, inspectors are usually representatives of other whaling nations. Infractions are penalized only by the flag state itself. The Commission's role, in effect is only to record the infractions. While it is not likely that the Commission itself would be granted direct powers of inspection, free access to inspect whaling operations should be opened to all members, with an obligation that they report their findings to the Commission. An active secretariat could encourage inspection and reporting while overseeing also the effectiveness of national sanctions for violations.⁴²²

Control over activities outside a commission involves the activities of both members and nonmembers. The Commission should explicitly require that all members prevent activities within their jurisdictions that facilitate either noncompliance by members or avoidance of Commission rules by nonmembers. In the IWC context, a range of sanctions could be imposed by the general membership against members that trade in whale products with nonmembers or sell whaling equipment to nonmembers. Under such a provision, the United Kingdom, for example, could be required to use economic sanctions to stop British companies from insuring pirate whaling vessels or to prevent South African shipyards from outfitting them. Again, IWC enforcement actions would be far more effective if the secretariat were given explicit authority to collect and disseminate information on violations and to encourage acceptance of and compliance with Commission regulations. Cooperation with NGO's would also aid enforcement.

In conclusion, there is a long way to go to attain an ideal conservation convention. In its priorities, scope of jurisdiction, decisionmaking structure, procedures and content, and implementation the IWC falls far short. No change is likely, given the lack of progress in the renegotiation conferences of the last two years. Indeed, with the possibility that the gains already made through Schedule changes and political pressure outside the organization will be lost, conservation interests

422. For a discussion of similar problems in ship pollution control, see M'GONIGLE & ZACHER, *supra* note 69, ch. 8.

stand to lose more in the renegotiation than they are likely to gain. The present balance of political forces once again dictates incremental change. Thus, changes, if any, should be accomplished through a limited purpose protocol. In any event, as whaling declines in importance, it is more crucial that the much broader convention that has recently been drafted under the Antarctic Treaty be made to live up to the ecological ideal. This result too is unlikely.

B. Convention for the Conservation of Antarctic Marine Living Resources: A Critique

Despite its importance for the entire world, the future of the fragile Antarctic ecosystem was recently determined by the thirteen consultative parties to the 1959 Antarctic Treaty.⁴²³ During 1980 this handful of states quietly drafted a Convention for the Conservation of Antarctic Marine Living Resources in response to growing pressure to exploit krill, the food on which the whales depend. The political and legal ramifications of this negotiation are complex, and it will not be possible in this Perspective to delve deeply into the issues.⁴²⁴ Nevertheless, the ecological import of this new convention is so great and its success so precarious that it is essential to understand and evaluate the history and results of the Antarctic negotiations. In addition, this treaty is but a precursor of others that will follow shortly on even more controversial—and potentially catastrophic—issues: oil and gas exploitation of the continental shelf and mineral exploitation of the land mass.

The operation of the IWC has much to teach us about what is required for an ecologically successful Southern Oceans Convention (SOC). Experience with tradeoff and compromise, a mainstay of the weak legal structure governing whale conservation, should offset the false optimism that surrounds a new regime. Where economic interests are strong, only clear legal obligations can provide any measure of future security. The initiation of the Antarctic negotiations before serious exploitation had begun provided a unique opportunity for governments to assert control from the beginning. With the new treaty, concluded in May 1980 at a multilateral conference in Canberra, Australia, this opportunity is gone.

Until 1959, Antarctica was a disputed continent. Argentina, Australia, Chile, France, New Zealand, Norway, and the United Kingdom

423. Antarctic Treaty, Dec. 1, 1959, 12 U.S.T. 794, T.I.A.S. No. 4780, 402 U.N.T.S. 71 [hereinafter cited as Antarctic Treaty].

424. Other authors have recently done so. For an analysis with an exhaustive coverage of the relevant literature, see Note, *Thaw in International Law? Rights in Antarctica under the Law of Common Spaces*, 87 YALE L.J. 804 (1978). See also Note, *Survival of the Antarctic Treaty: Economic Self-Interest vs. Enlightened International Cooperation*, 2 B.C. INT'L. & COMP. L. REV. 115 (1978); *Symposium*, 33 U. MIAMI L. REV. 285 (1978). The definitive work on Antarctica is B. MITCHELL & R. SANDBROOK, *supra* note 334.

claimed territory there. The United States and the Soviet Union denied these claims and asserted special interests for themselves. The 1959 Antarctic Treaty attempted to respond to the potential for conflict in this rich and as yet unspoiled land. Rather than resolving the conflicting claims, however, the treaty preserved the status quo. The parties agreed that no new claims would arise throughout the thirty-year life of the treaty.⁴²⁵ In addition to the nine original claimants, Belgium, Japan, and South Africa were original signatories to the treaty. With Poland's recent accession, there are now thirteen Antarctic Treaty Consultative Parties.⁴²⁶

The Antarctic Treaty was creative. Its main concern was to preserve the unique Antarctic land as a scientific preserve and to safeguard its environment.⁴²⁷ Nevertheless, by being so limited, the convention ignores the possibility of resource exploitation; it explicitly states that it does not affect the freedom of the high seas within the area.⁴²⁸ These omissions are particularly significant in light of the recent discovery of great fisheries potential in the seas, mineral resources in the land, and oil and gas in the continental shelf. In a pattern familiar to environmental lawyers, technological and economic developments have again left the law behind. Some commentators have asserted that these new developments may conflict with the goals of the treaty.⁴²⁹ For these reasons the territorial claims of the thirteen Antarctic treaty powers remain tenuous.⁴³⁰ Their claims cannot be supported if their acts are in-

425. Antarctic Treaty, *supra* note 423, art. IV.

426. The new treaty defines this term to mean the contracting parties to the Antarctic Treaty who participate in the regular meetings called pursuant to article IX of the treaty. Conference on the Conservation of Antarctica Marine Living Resources, Second Report of Drafting Committee to Plenary, art. V, para. 3, DOC CAMLR/70/Add. 1 (May 19, 1980) [hereinafter cited as 1980 CAMLR]. This would include the original parties to the treaty and those members who have become Contracting Parties by accession and who conduct "substantial scientific research activity" in the Antarctic. Antarctic Treaty, *supra* note 423, art. IX, paras. 1, 2.

427. Antarctic Treaty, *supra* note 423, arts. II, IX, paras. 1(b), 1(f).

428. *Id.* art. VI.

429. Hambro, *Some Notes on the Future of the Antarctic Treaty Collaboration*, 68 AM. J. INT'L L. 217, 223 (1974).

430. See Note, *Thaw in International Law? Rights in Antarctica under the Law of Common Spaces*, 87 YALE L.J. 804 (1978). The author argues that the Antarctic Treaty powers have no enforceable territorial claims and that the entire area

today must be governed by . . . an international "law of common spaces." . . . [N]o party or exclusive association of parties may exploit nonrenewable resources, create dangers to the environment, or establish any system of exclusive control in spaces that are . . . of value to mankind generally and for which there has developed a practice of general expectation of common access, use, or control.

Id. at 806-07. Exclusive territorial claims are untenable because they conflict with historical patterns of exploration and agreement in Antarctica, are based on an inadequate application of various international law doctrines, depend upon outmoded assumptions, and contradict the common space rights affirmed (but left unstructured) by the Antarctic Treaty. *Id.* at 807-08, 828.

consistent with the treaty's conservationist and nonterritorialist goals. Any new agreements should conform to these basic goals. The recent Southern Oceans Convention most clearly does not.

The initial challenge to the Antarctic Treaty has been the development of a fishery based on small, shrimp-like crustacea called krill, or *Euphausia superba*. Krill are the primary source of food for much of the fish, bird, and marine mammal life in the Antarctic, including the baleen whales, which feed on it throughout the Antarctic summer.⁴³¹ In addition, the huge krill biomass plays a crucial role in the nutrient cycle that replenishes the southern hemispheric oceanic system. The preservation of krill is of serious ecological consequence.⁴³²

High in protein and found in great swarms,⁴³³ krill may be the world's largest untapped source of food. Visions of doubling the entire world fish catch have engaged the interest of Japan, the U.S.S.R., Poland, West Germany, and many others. Only harvesting and marketing problems have impeded an explosion of activity. Recent evidence indicates that these problems may be severe.⁴³⁴ Even so, exploitation has increased from a few thousand tons a year only five years ago to as much as 200,000 tons last year.⁴³⁵ Against visions of tens of millions of tons, this amount seems insignificant. Nevertheless, the speed with which technological expansion can occur should not be underestimated, and, as the history of negotiations on seabed mining at the United Nations Law of the Sea Conference should by now have made clear, economic interests become entrenched long before any visible sign of large-scale investment.⁴³⁶

A chorus from concerned scientists has been raised to counter the

431. See Scarff, *supra* note 7, at 339.

432. For a full discussion of krill and implications of krill harvesting, see B. MITCHELL & R. SANDBROOK, *supra* note 334.

433. With the great paucity of baseline studies of the Antarctic ecosystem, it is an open question whether there actually is any excess krill. Despite the great krill biomass and the decline of great whales, it appears that the entire marine system has adjusted with the now more abundant seals and small minke whales occupying the niche left vacant with the great whale's demise. See generally B. MITCHELL & R. SANDBROOK, *supra* note 334, at 31-40.

434. Problems include poor detection, destructive netting techniques, rapid spoiling, and uncertain acceptability of the product. These problems relieve the pressure on krill, but the potential for economic interests is so great that a profitable combination of solutions is quite likely. Recently, however, there have been indications that the Japanese fisheries agency is reevaluating the value of a krill fishery in light of escalating fuel costs and the continuing lack of consumer interest. See *Future Protein in Trouble*, Ashahi Shimbun (Tokyo ed.), Oct. 3, 1979, at 11.

435. *Hearings*, *supra* note 20, at 28 (statement of J. Barnes, Center for Law and Social Policy). Barbara Mitchell and Lee Kimball report the 1977-1978 catch at 122,000 tons. Mitchell & Kimball, *Conflict over the Cold Continent*, 35 FOREIGN POL'Y 124, 128 (1979).

436. Even at the commercial exploratory stages, plans are being made for many years ahead, investment decisions are being taken, and a powerful political lobby is being consolidated. It is a mistake to believe that decisions are easily alterable up to the time when the investment resources are actually committed.

increasing exploitation and investment. At recent Senate hearings on the Antarctic regime, Dr. Edward Todd of the National Science Foundation pointed to the great ignorance of krill ecology, noting that "reputable scientists around the world disagree by a factor of 8 to 9 as to possible total population."⁴³⁷ John Twiss, Executive Director of the Marine Mammal Commission, argued in these hearings that any talk of a krill surplus was "unsupported by scientific evidence" so that "substantial reductions in krill availability might further seriously hinder the [baleen whale population] recovery."⁴³⁸ Dr. Todd foresaw the possibility of "disastrous consequences not only for this species but for the entire Antarctic ecosystem."⁴³⁹ Because little is known about the krill's rate of regeneration, the nature of its seasonal fluctuations, the structure of dependency among other species, and the time lag between the infliction and detection of harm,⁴⁴⁰ these concerns are very real.

But the Antarctic negotiations are "high politics" with important interests at stake.⁴⁴¹ Territorialist claimants are concerned not to compromise their claims, the fisherman seek easy access to the abundance of riches waiting to be harvested, and the industrialists want to protect their ambitions for mineral and hydrocarbon exploitation and to avoid precedents that might impede their projects. With each state seeking to protect its highest priority, the pressure for compromise is great, and is made all the more intense by the shared desire to exclude others.⁴⁴²

With so much at stake, surprisingly little public discussion of the issues has occurred. The leading NGO involved in the Antarctic issue has been the London-based International Institute for Environment and Development (IIED). Founded by economist Barbara Ward, this organization has for many years led a campaign to research and explain environmental issues. Because of its concern with reconciling two of the most crucial issues of our times, environment and development,

437. *Hearings*, *supra* note 20, at 22.

438. *Id.* at 18.

439. *Id.* at 22.

440. Dr. John Beddington, whose work has been so important at the IWC, pointed to one such unknown:

[T]here is a complex migration pattern of the baleen whales into the Antarctic waters during the summer and it seems clear that this pattern is finely tuned to the life cycle of the krill. There is thus a problem that inappropriate timing of the commercial krill harvest could affect the feeding efficiency of the whales.

Quoted in *Hearings*, *supra* note 20, at 41 (statement of Barbara Mitchell and Richard Sandbrook, International Institute for Environment and Development). Dr. Beddington also stressed the time lag that might occur between the infliction and the detection of any harm to the biological system as a whole. *Id.*

441. Negotiations on the marine resources regime began as a result of a decision taken at the Ninth Consultative Session of the thirteen treaty powers in London in September 1977. Two special meetings have since been held, one in Canberra in February-March 1978, and one in Buenos Aires in July 1978.

442. See text accompanying note 425 *supra*.

the IIED is naturally attracted to the Antarctic problem. Recently, the IUCN in its role as an "information generator" has funded the IIED's Antarctic research.⁴⁴³

The British organization, however, has had no direct access to the negotiations because it was not accredited to any delegation. It has had to rely upon two American NGO's, the Sierra Club and the Center for Law and Social Policy, that were accredited to the American delegation.⁴⁴⁴ The center took an especially constructive role by organizing a large multinational coalition of environmental organizations, the Antarctic and Southern Ocean Coalition (ASOC), and sponsoring a scientific workshop on Antarctica immediately prior to the final treaty negotiations.⁴⁴⁵ This action represents the only direct participation by nongovernmental interests in the entire negotiating process, and, in concert with government agencies such as the Marine Mammal Commission, these two groups have prompted the United States to advocate a strong conservation regime. At the level of hard compromise, however, even these actors were excluded; thus the American conservationist position has likely been little more than a bargaining chip.

Several other governments, notably the United Kingdom, New Zealand, and Norway, have also been seriously concerned with achieving a sound conservation regime. Nevertheless, the final treaty negotiation that took place in Canberra from May 5 to May 20, 1980, did nothing to improve the weak draft. In fact, according to the omnipresent observer *ECO*, the negotiators were preoccupied throughout the meeting with a jurisdictional dispute between the U.S.S.R. and the European Economic Community over the latter's right to participate in the convention.⁴⁴⁶ Proposed alternatives to the draft were rejected by the Soviet Union, and the other delegations, anxious to protect their own special interests, acquiesced in the proposed text without significant alterations. Nongovernmental observers, including the 88-member ASOC, were excluded from the proceeding. Intergovernmental representatives, including those from the IWC, FAO, and IUCN, were barred from all but the most cursory plenary sessions.⁴⁴⁷

One useful provision was accepted:⁴⁴⁸ a strong ecosystem conser-

443. The IIED's Barbara Mitchell has written widely on the Antarctic living resources issue. See, e.g., Mitchell & Kimball, *supra* note 435.

444. Interview with James Barnes, Center for Law and Social Policy, in Washington, D.C. (June 1, 1980).

445. *Id.*

446. See *EEC Plays Russian Roulette*, *ECO*, July 16, 1980, at 1, col. 1.

447. See Interim Report to ASOC Member Organizations on the Canberra Conference on the Conservation of Antarctic Marine Living Resources 3 (May 20, 1980).

448. The most thorough discussion of the content of the new treaty is Barnes, *The Emerging Antarctic Living Resources Convention*, in *THE NEW NATIONALISM AND THE USE OF COMMON SPACES: ISSUES IN MARINE POLLUTION AND EXPLOITATION OF ANTARCTICA* (J. Chaney ed. forthcoming 1981). Barnes has also presented a comprehensive analysis of

vation standard that reflects the policies of the Marine Mammal Protection Act.⁴⁴⁹ This standard is especially important in relation to krill, since "this is the first time man has considered fishing for an organism so low on the trophic level, upon which such a wide variety of species is dependent."⁴⁵⁰ The conservation standard reflects a three-fold concern to maintain the size of any harvested population at least at the level that would ensure its stability, to maintain the ecosystem in balance, including restoring depleted populations, and to prevent any changes that are not reversible within a few decades.⁴⁵¹ This is the first time such an extensive approach has been developed internationally and it is an important legal milestone in the transition from MSY-based exploitation to an ecological model.

Considering the great uncertainty and the sizeable economic interests involved, this standard is an ambitious goal that will require tight controls to be meaningful. These controls, however, are almost entirely absent from the operative articles of the convention. Instead, in its important provisions, the convention is as weak and in some places weaker than the 1946 Whaling Convention.

Although the new convention has been prepared in advance of serious exploitation, the provisions for effectively controlling the introduction of the krill industry are almost nonexistent. The new convention will come into force with ratification by eight treaty powers, which could take many years.⁴⁵² In the interim, no provision establishes catch levels or requires that data be collected or submitted by the exploiters. A weak proposal urging states to collect such data was passed, but even this nonbinding resolution only requests that the data be presented to the other contracting parties if and when the treaty comes into operation.⁴⁵³ It is important to receive early "baseline" data before the ecological system has been seriously disturbed by man. Nevertheless, as the chief American negotiator, Ambassador Robert C. Brewster, told the Senate, the current exploiters "are prepared to make that data available to an [Antarctic] organization but not before [the treaty takes effect.] . . . At present there is no way of soliciting catch

the draft treaty with a proposed set of alternative formulations in *The Emerging Convention on the Conservation of Antarctic Marine Living Resources* (September 14, 1979). Mr. Barnes is concerned about both living and mineral resource exploitation, and he argues persuasively the need for Antarctica to become a "World Preserve" with the treaty powers acting in a trusteeship role.

449. 16 U.S.C. §§ 1361-1407 (1976).

450. Memorandum from Jim Barnes, Center for Law and Social Policy, to conservation groups (Nov. 20, 1978).

451. 1980 CAMLR, *supra* note 426, art. II, para. 3. For a critical discussion of this article, see B. MITCHELL & R. SANDBROOK, *supra* note 334, at 128.

452. Conference on the Conservation of Antarctica Marine Living Resources, Resolution 2, para. 3(c).

453. *Id.*; 1980 CAMLR, *supra* note 426, art. XXVIII.

data from all the countries involved.”⁴⁵⁴ In addition, since data are unavailable, there is no way to control the level of investment before the treaty takes effect, even though the absence of such control is the fundamental cause of ecological overexploitation.

Even at the conclusion of this interim period, the convention does not provide the authority necessary to ease the industry into exploitation without unbalancing the ecosystem. There is no guarantee that early data will be provided, nor is there any reliable provision to ensure that salvage research can be done later. The financing of research will be subject to the decision of the Commission,⁴⁵⁵ which is not likely to be receptive. One provision requires the submission of industry data, but only “to the greatest extent possible.”⁴⁵⁶ This measure is similar to the IWC’s provision requiring members to “take all practicable measures” to obtain such data.⁴⁵⁷ Even with this weak requirement, there is no enforcement procedure contemplated for those who fail to abide by it. There is certainly not a “no data, no quota” provision.

Data submitted by parties to the convention will go to a Scientific Committee similar to that of the IWC. In the absence of provisions for effective research and with the economic interests at stake, there is little chance that disinterested science will prevail over political pressure. Furthermore, the proposed Antarctic Commission is not obliged to follow the committee’s recommendations or explain its divergence from them. The Commission need only “take full account” of recommendations.⁴⁵⁸ This situation is worse than the IWC’s present practice under the New Management Procedure, which directs the Commission to classify whale stocks in accordance with the estimates of the Scientific Committee. In addition, few states will be allowed to participate in these decisions, since membership is to be restricted to states “interested in research or harvesting activities.”⁴⁵⁹ This requirement will severely limit submission to the Commission of conservation initiatives. Finally, the Commission is given no explicit power to allocate quotas between countries.

Despite the importance and sensitivity of this huge Antarctic ecosystem, the interstate negotiations have produced provisions for scientific review and regulation that do not fulfill the objectives of the new convention. In this light, the proposed decisionmaking procedure takes

454. Hearings, *supra* note 20, at 5.

455. 1980 CAMLR, *supra* note 426, art. XIX, para. 1.

456. *Id.* art. XXI, para. 1.

457. 1946 Whaling Convention, *supra* note 47, art. VIII, para. 4.

458. 1980 CAMLR, *supra* note 426, art. IX, para. 4. The absence of a provision in the draft convention for a technical committee indicates that quotas will not be allocated among nations. This could lead to a situation similar to the “Whaling Olympic.” See B. MITCHELL & R. SANDBROOK, *supra* note 334, at 135-37.

459. 1980 CAMLR, *supra* note 426, art. XXIX.

on great significance. Not surprisingly, it too is deficient. More restrictive even than the IWC's three-quarter majority rule, the proposal requires consensus (unanimous) voting⁴⁶⁰ plus an objection procedure on substantive issues that allows any state to reject any decision.⁴⁶¹ The consensus procedure protects the interests of the territorial claimants and "favours conservation so long as quotas are expanding, but favours continued overfishing when overfishing has started."⁴⁶² Even the potentially conservationist impact of consensus voting is removed with the inclusion of the objection procedure. This double veto extends to the control over the budget, and thus over scientific research, and "virtually guarantees that no restrictive measures will be implemented."⁴⁶³ Moreover, there is no mandatory dispute settlement requirement.⁴⁶⁴

The new convention is badly deficient in two other important areas. The test of any system is its implementation, and the SOC does little to strengthen traditional practices there. It does not provide for inspection procedures or guarantees of access.⁴⁶⁵ These issues are left to future determination by the Commission, although it is again agreed that the flag state will be solely responsible for prosecutions and sanctions. Enforcement is unreliable if there is no accountability to any higher authority.⁴⁶⁶ Moreover, without guidelines as to who may inspect exploitation activities, the evolution of strong enforcement regulations is unlikely.

Finally, following the uniform desire of the treaty parties to exclude the rest of the world from the Antarctic bonanza, the SOC does not recognize the interests of the larger world community and refers only incidentally to other international organizations. Despite the many legal arguments that the Antarctic should be considered the "common heritage of mankind," there has been no recognition of any entitlement by the Third World to the protein value of krill. Membership is to be limited to countries having a demonstrated interest in Antarctic exploitation or research, and before a state may join the convention, it must accept the treaty powers' special claims to the area.⁴⁶⁷ To date, the Third World has expressed little interest in joining; under pressure from two territorial claimants, Chile and Argentina, it will likely continue to refrain from doing so, at least until the conclusion of

460. *Id.* art. XII, para. 1, 2.

461. *Id.* art. IX, para. 6(c).

462. Earthscan, Krill (1979) (press briefing document no. 15).

463. Mitchell & Kimball, *supra* note 435, at 136.

464. 1980 CAMLR, *supra* note 426, art. XXV.

465. *Id.* art. XXIV.

466. This has been true concerning flag state enforcement in the field of international shipping. M'GONIGLE & ZACHER, *supra* note 69, chs. 6, 8.

467. 1980 CAMLR, *supra* note 426, art. V.

the Law and the Sea Conference.⁴⁶⁸

The Antarctic powers have eschewed any clear link with other international organizations, especially the FAO or the U.N. Development Programme.⁴⁶⁹ These two organizations have undertaken extensive investigations into the potential of krill fisheries with the goal of internationalizing access to the fisheries. As a result, these organizations have consistently been rebuffed by the treaty powers; while mentioned in the SOC,⁴⁷⁰ the nature of any relations with them remains uncertain. Similarly, despite the considerable need for close coordination with the IWC, there are no provisions requiring the cooperative decisionmaking essential to implement fully an ecosystem approach. This coordination should be strengthened.

In conclusion, there remain serious obstacles to the successful conservation of Antarctic krill, of those species dependent upon it, and perhaps of the larger oceanic ecosystem. Under these circumstances the international community beyond the Antarctic treaty powers should not hesitate to reject the new SOC. First, the special claims of the negotiators are founded upon a history of colonial expansion, a poor foundation for the assertion of evolving legal rights in light of the global trend away from colonization. As a result, in drafting the convention, the Antarctic treaty powers operated in an extremely secretive manner, excluding other states and organizations from participating and upsetting their dominance. Second, the new convention emanates from the twin objectives of consolidating exclusive territorial control and furthering exploitation interests—both of which violate the spirit of the 1959 Antarctica Treaty from which the negotiators drew their special powers. The parties have created a convention that is a strong fortress for excluding other states. Controls over members are weak, however, reflecting the “lowest-common denominator” among the participants, which have competitive exploitative goals.⁴⁷¹ It is questionable whether such an institution is worth having for the Antarctic at this early stage in the exploitation and management processes. Finally, the new treaty fails to ensure that the ecosystem will be preserved and excludes from membership Third World states with significant claims to the protein value of krill, weaknesses that by themselves should be grounds for rejection. With these numerous deficiencies, the new

468. The exclusion of Antarctic issues from the Law of the Sea Conference must have been part of a “package deal” involving the Group of 77. On Third World interests in Antarctica, see Earthscan, *supra* note 462, at 45-46; B. MITCHELL & R. SANDBROOK, *supra* note 334, at 25-30, 110-26.

469. On relations with the FAO and UNDP, see Earthscan, *supra* note 462, at 46-48.

470. 1980 CAMLR, *supra* note 426, art. XXIII.

471. The inevitable choice of an organizational structure reflecting the lowest common denominator in competitive interstate negotiations has been referred to as “institutional economizing.” J. RUGGIE, *THE STRUCTURE OF PLANETARY POLITICS*, ch. 3 (forthcoming).

Southern Ocean Convention is simply not a legally compelling document. At the very least, it should be rejected as precedent for future Antarctic negotiations.

In this diplomatic game, the performance of the avowedly conservationist United States has been particularly disappointing. The United States not only could have prevented this weak regime from being adopted, it also could have exerted its influence to ensure that a strong treaty was adopted. This coercive power is crucial where the absence of agreement benefits only the exploiters.

The United States, however, chose not to exert much pressure. This choice exemplifies the almost mutually exclusive relationship that exists between economic and ecological interests. Mitchell and Kimball present a devastating indictment of American concerns.⁴⁷² Referring to the American government's "passive stance on certain crucial issues,"⁴⁷³ including the powers and decisionmaking structure of the new Commission, they claim that the United States may have been "unwilling to do anything from the practical and juridical point of view that would jeopardize its position on minerals."⁴⁷⁴ Citing an "unnamed U.S. official," Mitchell and Kimball contend that an earlier administration was

unwilling to take any step which directly reduced the freedom of American companies to go where they wanted in the Antarctic and do whatever appeared to be commercially attractive or which obliged the U.S. government to agree to consult with other parties before issuing any license to a commercial applicant for rights to mineral exploration or exploitation.⁴⁷⁵

Such an attitude by the United States is extremely shortsighted.

The treaty powers must realize that they do not have a legitimate claim to the condominium they desire and that the developing countries will undoubtedly challenge their claims.⁴⁷⁶ With the substantial political uncertainty that surrounds any hope for a long-term condominium by the Antarctic treaty powers, the costs to these states of a

472. Mitchell & Kimball, *supra* note 435, at 137.

473. *Id.* at 138.

474. *Id.*

475. *Id.* at 139-40.

476. There is widespread agreement on the weakness of the territorial claims. See generally Alexander, *A Recommended Approach to the Antarctic Resources Problem*, 33 U. MIAMI L. REV. 371 (1978); Note, *Survival of the Antarctic Treaty: Economic Self-Interest vs. Enlightened International Cooperation*, 2 B.C. INT'L & COMP. L. REV. 115 (1978); Note, *Thaw in International Law? Rights in Antarctica under the Law of Common Spaces*, 87 YALE L.J. 804 (1978).

The most recent challenge to the "exclusive attitude" and "secretive style of negotiation" of the Antarctic "club" came from Alvaro de Sota, the Peruvian diplomat. Mr. de Sota is the spokesman for the Group of 77 and has affirmed his support for declaring Antarctica a "common heritage." *Antarctica—Third World Fear of Being Frozen Out*, 10 IUCN BULL. 99 (1979).

"common heritage" approach are much reduced. Inclusion in the decisionmaking process of many countries that are not exploiters and that had no technological capability of becoming exploiters for years would have limited the power of states seeking short-term unsustainable exploitation.⁴⁷⁷ For the United States and other treaty powers to forego the environmental benefits of such broad-based participation in the Commission and to pursue the problematic and very long-term goal of exploiting the mineral and energy wealth of the southern ocean is to follow an outdated conception of security and self-interest.⁴⁷⁸

VI

CONCLUSION: DIRECTIONS FOR ECOLOGICAL DECISIONMAKING

*The environment is not just one more factor to be considered along with dozens of others in making social and economic decisions. The environment is not a crisis or a problem at all. Rather it is the context in which all crises and problems have to be analyzed and judged.*⁴⁷⁹

This study of the law and politics of whale conservation discusses but one part of a far larger issue: the integration of human economic and political systems in a limited global environment. In this larger context, the whale conservation issue stands out as one of the more fortunate examples. On few other issues have environmentalists concentrated such a sizable proportion of their resources; often the economic and political interests aligned against them have been far more formidable than those affiliated with the whaling industry. To redress the imbalance between economics and ecology through changes in the structure of society presents an incomparably greater challenge.⁴⁸⁰

Throughout this study, we have discussed two general approaches to man's interaction with the natural environment. Derived from a

477. Despite the fears of Westerners, this will slow down exploitation and allow greater controls to be asserted. This has been the effect of the "common heritage" status of deep seabed resources at the law of the sea negotiations.

478. To the extent that the United States is trading off krill conservation for freedom to exploit the mineral resources, there is a direct link between the internal demands of the consumer society and the environmentally and politically destabilizing external dependence that results. This is becoming the central issue of United States foreign policy in the 1980's, and it will not be resolved by continuing past practices of short-term exploitation to satisfy nonessential consumer interests. The needs of our contemporary economic system are the primary factor in American foreign policy decisions, including those decisions that might lead to military action. Thus, international political and legal commentators should address the issue of economic transformation.

479. William V. Shannon, *quoted in* R. ODELL, *ENVIRONMENTAL AWAKENING: THE NEW REVOLUTION TO PROTECT THE EARTH* 253 (1980).

480. Those who approach the cause of whale conservation as an isolated issue face a far more limited task than those who recognize the systemic source of this and other environmental problems. Only by addressing the more basic economic and political causes of these problems will a lasting resolution be achieved.

foundation of economic criteria are tools of decisionmaking that place economic exploitation above all other concerns. In contrast, this Perspective postulates an approach rooted in ecological needs and values and examines changes that might serve to institutionalize this approach to decisionmaking. Without reiterating the contrasts between these perspectives of political decisionmaking and legal control, this Perspective will briefly consider their larger implications for environmental law and politics.

We are now at an historical watershed. Unfettered economic growth has brought many people to their present privileged positions of material wealth with only occasional environmental losses as a damaging side effect. These side effects are becoming more widespread and of graver consequence, and our continuing inaction makes their prevention more difficult. As the limits of expansion and overexploitation press ever more strongly, the tendency is to become even more ruthless in the quest for economic security.⁴⁸¹ This tendency has been apparent in Soviet and Japanese fisheries policies, where past excesses have reduced present options. In their concern to exploit whatever fisheries remain, these nations continue to resist strong legal controls. Since other developed nations are equally committed to economic exploitation, their resistance to adaption in those areas that affect their specific concerns will be just as strong. The limited U.S. commitment to preserving the Antarctic is a consequence of this commitment to economic exploitation. Yet many of these same exploiting states also have rich democratic traditions in which citizens are permitted to question and challenge the decisions being made. It is the central conclusion of this Perspective that the adaptation and expansion of this democratic tradition to meet the needs of our times will provide the greatest security for the future.

This conclusion has implications for our approach to the study and operation of law, the foundation of democracy. As a first step, legal scholarship should be closely and critically integrated with an under-

481. Unfortunately, this repressive process is already underway. In the United States, the Congress considered the creation of an Energy Mobilization Board, which could have emasculated existing procedural and substantive environmental safeguards on energy exploitation. The House rejected the Conference Committee report in June 1980. 126 CONG. REC. H5783 (1980). See generally *Developments—Energy Law and the Environment*, 8 *ECOLOGY L.Q.* 725, 727 (1980). In the United Kingdom, the Conservative government of Margaret Thatcher has tightly restricted access to information about nuclear power projects. Interview with Peter Wilkinson, Greenpeace U.K. (Nov. 25, 1979). In France, a recent public inquiry on nuclear energy in Plogoff has been ignored by the government, provoking local citizenry to violent direct action. *Bretons Show Their Contempt for 'Public' Inquiries*, *Manchester Guardian Weekly*, Mar. 30, 1980, at 12, cols. 3, 6. In all these cases, the basic question is the choice between centralized technocratic management to sustain—at any cost—the economic system, and procedural guarantees of democratic participation to challenge and transform that system.

standing of the sciences of society: politics, economics, anthropology, sociology, psychology, and ecology. Concern for democratic theory, international relations, bureaucratic politics, and social conditioning should play a far greater role in the study of law. Contemporary interest in law and economics is a beginning, except insofar as the premises of a particular economic ideology are accepted uncritically as *a priori* truth. A critical integration of these analytical perspectives into a broader consideration of law and society is required. As we have repeatedly seen with scientific analyses, so too with law and the social sciences: ideology precedes expertise.⁴⁸²

The critical orientation advocated here requires the recognition of the decisive role that law and lawyers play in resolving our contemporary crises and, therefore, of their individual and collective responsibility.⁴⁸³ There is an almost total absence in legal writings of a moral concern that might point to alternative visions, goals, or strategies. Because law and lawyers are essential to the maintenance or change in the balance of political power, this narrow vision must itself be seen as part of the impediment to a resolution of our contemporary crises. If law is to contribute to the future, its function must be transformed from one that largely follows and facilitates economic processes to one that leads and initiates democratic decisionmaking.⁴⁸⁴

It follows that a structural change in the process of social decision-making is necessary. The political representation of the interests of "resources" traditionally has been lacking in economic decisions and in governmental regulation of such decisions.⁴⁸⁵ The slow evolution of a

482. This change in legal scholarship is but the first step of the "gestalt switch," see T. KUHN, *supra* note 2, implicit in Devall's concept of "deep ecology." Devall, *supra* note 381. See Devall for a discussion of the need for a "new metaphysics to guide man in nature." *Id.* For one of the best examples of legal scholarship as structural analysis, see R. UNGER, *KNOWLEDGE AND POLITICS* (1975).

483. On the ideological role of law, lawyers, and law schools, see M. HOROWITZ, *THE TRANSFORMATION OF AMERICAN LAW* (1977); J. AUERBACH, *UNEQUAL JUSTICE* (1976).

484. By creating reformist legal procedures founded upon a moral goal, diverse alternatives will emerge gradually without the dangers that inevitably accompany utopian planning.

485. Government has been concerned largely with attracting capital investment and maintaining employment rather than with promoting long-term resource maintenance. In the capital-labor-resource triangle that constitutes the foundation of economic production, the latter interests have become the least resistant source of easy exploitation and cheap wealth.

Various components of the production process established their political bases at different points in history. The eighteenth century gave birth to the powerful interests of independent capital, the nineteenth to the labor movement, and the twentieth to the interests of global resource protection. So long as one element of this triangle is weaker than the others, it will bear a disproportionate burden in the production process. This analysis has enormous implications for structural social changes of which present environmental lobbying is only a very small beginning. In this light, a central consideration of environmental activism must be to choose as issues those matters the resolution of which will alter the

small political base for these interests has begun to shift this imbalance in recent years. To stimulate that evolution is the imperative of the environmental movement.⁴⁸⁶ Such a transformation may not occur without more visible, widespread, and catastrophic evidence of management failure than has occurred at the International Whaling Commission. If changes are to occur democratically without collapse or catastrophe, the role of law in providing a foundation for political adaptation will be essential. One can easily propose a "common heritage" to protect Antarctica; the challenge will be in attaining it.

The proposed new conception of government and society is one that transcends the narrow traditional dichotomy between capitalism and socialism. Both of these social structures have failed to incorporate ecological needs, and both confront, in the words of Jürgen Habermas, a "crisis of legitimation."⁴⁸⁷ A structure of democratic decisionmaking that directs economic processes, democratizes bureaucratic power, and reinvigorates political participation and debate on fundamentals is needed.

At the national level, a first priority must be to open bureaucratic processes to interested parties. The effects of closed and insulated governmental actors have been discussed throughout this paper. Narrowly conceived economic needs receive top priority, and even scientific "truth" becomes tainted in the quest to meet what are perceived by bureaucracies to be necessities. As a beginning to economic change, those whose interests are noneconomic need greater access to information and greater power to initiate and affect decisions. Were governmental leaders willing to attempt such minor procedural changes, not only would the costs and undesirability of our present course become more visible, but a whole new range of alternatives would become mat-

direction of the economic process that underlies the environmental crisis as a whole. Nuclear energy and multinational resource exploitation are examples of such issues.

486. On this perspective in the context of the steady state, see H. DALY, *supra* note 22, at 90-91, 109-12. Concepts such as trusteeship, standing, and common heritage are being used as a legal base for the political representation of resources. Because such structural changes are prerequisites to an environmentally sound political economy, it is misleading for economists to treat externalities as isolated failures of an otherwise efficient system. Only the application of political power can control externalities. Thus, the balance of political forces, and the legal structure which augments or constrains those forces, are crucial issues.

487. J. HABERMAS, *LEGITIMATION CRISIS* (1975). The failure of capitalist economic principles and processes to consider long-term resource needs is augmented by a technocratic process that also has limited concerns. See T. ROSZAK, *THE MAKING OF A COUNTER CULTURE* (1969). Similarly, Marxist economics and socialist governments disregard resource needs and are prey to the weaknesses of intense bureaucratization. On the failure of capitalist democracies, see C. MACPHERSON, *THE LIFE AND TIMES OF LIBERAL DEMOCRACY* (1977), especially his discussion of participatory democracy. *Id.* at 93-115. Jürgen Habermas refers to the desire to "increase the reflexivity of the administration by tying it to the society through discursive will-formation and participation." J. HABERMAS, *supra*, at 132.

ters for legitimate debate.⁴⁸⁸ With such debate, the benefits of change would become apparent, and the political support to achieve it might follow. In place of the inertia of a weak and rudderless representative democracy, the crisis of the environment calls for the involvement of the population in an active and enlightening process of anticipatory democracy.⁴⁸⁹

If this simple proposal seems utopian, it should be remembered that it is a process that is already under way. Although but a decade old, popular environmental pressure groups have had some impact, as we have seen at the International Whaling Commission. Yet the forces they confront are enormous, and popular participation is uneven. Indeed, in even the most democratic countries, such participation is still widely viewed as illegitimate.⁴⁹⁰ As the fragmented problems of the 1970's coalesce into the systemic crises of the 1980's, the need to develop a structure of broad-based participation will become ever more evident. Only in this way will popular preferences and elite decisions coincide to meet ecological needs.

These needs transcend the limited scope of the individual state. As we have seen, economic and environmental issues are transnational in scope. Our interstate basis for negotiated decision has fallen behind economic and technological developments, as has our present intrastate representative democracy. A new level of transnational cooperation is required as well.

Concerned international lawyers first should try interstate bargaining to achieve the best immediate results. The related process of pressuring national governments remains the major focus of most NGO's and will continue to be so for the foreseeable future. The global nature of the problem requires a vision larger than national boundaries, however, especially with the growing urgency of many Third World needs. Many multinational exploitation interests have successfully straddled national boundaries. For environmental interests, the objective now

488. The discussion of alternatives must be "legitimized." Presently, the mere mention of certain issues precludes discussion, since these issues are rejected as being *a priori* illegitimate without consideration of their merits. At the IWC, the concepts of ecosystem management and the value of cetaceans as other than resources for consumption were long rejected as "illegitimate" viewpoints, despite supporting evidence, precisely because such evidence challenged the prevailing system. This largely unconscious screening process insulates decisionmakers from the ideological nature of their values and decisions. Its operation is now evident at a much larger level in the rejection of ecological values by those schooled in the pervasive philosophical and political assumptions of neoclassical economic ideology. Because this process precludes fundamental self-examination, it is extremely dangerous when it effectively insulates powerful actors. Yet, this is one of the most obvious features of centralized bureaucratic politics, especially where it is ostensibly founded on "objective expertise."

489. See generally C. BEZOLD, *ANTICIPATORY DEMOCRACY* (1978). "Anticipatory democracy" combines citizen participation and future consciousness. *Id.* at xii.

490. See note 488 *supra*.

must be to supplement the interstate process with a similar network of transnational coordination. The environmental movement must expand geographically while developing a transnational structure of political obligation and legal control that matches the existing level of transnational economic exploitation.⁴⁹¹

These changes at both the national and international levels will not occur easily. They are necessary, however, because the present competitive negotiations between states founded on centralized and largely unaccountable economic and political power are structurally incapable of producing ecologically sound international law. These negotiations are but an unstable instrument of national economic interests. Only a radical transition to direct democratic participation at all levels of intra and interstate decisionmaking can eliminate overexploitation and lead to a balanced global ecology. We are not without alternatives. In view of the escalating ecological crisis, we must consider them.

POSTSCRIPT: 1980 IWC MEETING

"A triumph of politics over science and reason" proclaimed the London *Guardian* at the conclusion of the 1980 meeting of the IWC.⁴⁹² As the meeting opened in Brighton, England on July 21, conservationists expected that the Commission would finally adopt significant quota reductions and possibly a moratorium.⁴⁹³ Evidence before the Scientific Committee⁴⁹⁴ indicated that lower quotas⁴⁹⁵—and the power to enforce them⁴⁹⁶—were needed to protect endangered whale species,

491. For an extended discussion of this point, see C. BEITZ, *POLITICAL THEORY AND INTERNATIONAL RELATIONS* 125-83 (1979).

An important additional point should be made in relation to transnational economic activity. C. MACPHERSON, *supra* note 487, discusses the tension between the economic and democratic strands of liberal democracy. MacPherson's concern is that the two are essentially incompatible, with the one (economic) potentially overwhelming the other. If this analysis is taken to a global level, one can readily appreciate the dangers inherent in the application of neoclassical economic techniques to countries without a democratic tradition. The effect is totalitarianism on a wide scale. Environmentally, of course, this has devastating consequences, since the political pressure that alone could begin to control externalities is never given an opportunity to arise. Therefore, the economics of the industrialized West should not be exported without the accompanying export of democratic government. This is far from the contemporary situation, pointing to the size of the challenge confronting transnational environmentalists.

492. *Whale Lobby Feels Twist of the Knife*, *The Guardian*, July 28, 1980, at 4, col. 7.

493. *Compromise Rules*, *ECO*, July 26, 1980, at 1, col. 1.

494. Several NGO's supported research on whale populations, member nation violations, and pirate whaling. See, e.g., J. Cooke, *supra* note 285; J. Frizell, C. Plowden & A. Thornton, *Outlaw Whalers 1980* (1980) (Greenpeace, San Francisco) [hereinafter cited as *Outlaw Whalers 1980*]; C. Mearns, *International Trade in Whale Products: A Review* (June 1980) (Royal Society for the Prevention of Cruelty to Animals).

495. See *Report of the Scientific Committee*, Doc. IWC/32/4 (1980).

496. The IWC attempts to enforce quotas by placing international observers on whaling

especially the sperm whale.⁴⁹⁷ In spite of this evidence, negotiations over quotas and the moratorium became deadlocked as four overlapping blocs became entrenched: the nine whaling nations;⁴⁹⁸ coastal states, led by Canada, which sought to restrict IWC jurisdiction within their 200-mile exclusive economic zones;⁴⁹⁹ the United States, which demanded a large bowhead quota for the Alaskan Eskimos in spite of the committee's zero quota recommendation;⁵⁰⁰ and the eleven conservationist countries.⁵⁰¹ As a result of compromises struck at the end of the negotiations, the Commissioners rejected the committee's moratorium proposal⁵⁰² and many of its recommendations for lower or zero quotas⁵⁰³ and granted the United States a substantial three-year bowhead quota.⁵⁰⁴ A total quota of 14,107 was approved, a reduction of only 2,130 from 1979.⁵⁰⁵ Finally, despite evidence of 722 quota violations during the 1979-80 season,⁵⁰⁶ the Commission took no action to ensure future compliance. This widespread noncompliance, coupled with the overt challenge to the Commission's jurisdiction by coastal states, may signal a challenge to the IWC's authority to regulate whaling. Support by the United States—which need not bargain with the whaling states for a bowhead quota again until 1983—will be critical to ensure that the present regulatory regime, however flawed, does not disintegrate.

ships and at land processing stations. There are presently too few observers, however. For example, a single observer must monitor four Japanese land stations, and there are no observers in Spain, Peru, Chile, Brazil or South Korea. Outlaw Whalers 1980, *supra* note 494, at 11.

497. *Report of the Scientific Committee*, Doc. IWC/32/4, at 13 (1980).

498. The whaling nations attending were Brazil, Chile, Iceland, Japan, Korea, Norway, Peru, Spain, and the Soviet Union. *A Quick Guide to the IWC*, ECO, July 21, 1980, at 3, col. 2.

499. The coastal states that were especially sensitive to Canadian arguments about the threat of IWC regulations to coastal state jurisdiction were Argentina, Brazil, Chile, Mexico, Peru, and Spain.

500. *Bowhead Quota Down and Out*, ECO, July 26, 1980, at 4, cols. 2 & 3.

501. The conservationist countries attending were Argentina, Australia, France, Mexico, the Netherlands, New Zealand, Oman, the Seychelles, Sweden, Switzerland, and the United Kingdom. *A Quick Guide to the IWC*, ECO, July 21, 1980, at 3, col. 2.

502. *Report of the Scientific Committee*, Doc. IWC/32/4, at 17 (1980).

503. *Id.* at 27-29, 31-33, 37-38.

504. *Bowhead Quota Down and Out*, ECO, July 26, 1980, at 4, cols. 2 & 3.

505. *Compromise Rules*, ECO, July 25, 1980, at 1, col. 1; *The Quotas*, ECO, July 26, 1980, at 1, cols. 2 & 3. ECO reported that the 1981-82 Minke quota was 6,718. In fact, the quota was set at 7,072. Marine Action Centre Newsletter, Aug. 1980, at 8.

506. See *Report of the Scientific Committee*, Doc. IWC/32/4, at 4-9 (1980).

